1CH VIDEO WEB SERVER

USER MANUAL

Please read instructions thoroughly before operation and retain it for future reference.

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We are pleased to provide our modifications to the Linux Kernel, as well as a few new commands, and some tools to get you into the code. The codes are provided on the FTP site, and please download them from the following site or you can refer to your distributor:

http://download.dvrtw.com.tw/GPL/076D_Series/arm-linux-2.6.tar.gz

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1. OVERVIEW

1.1 Product features

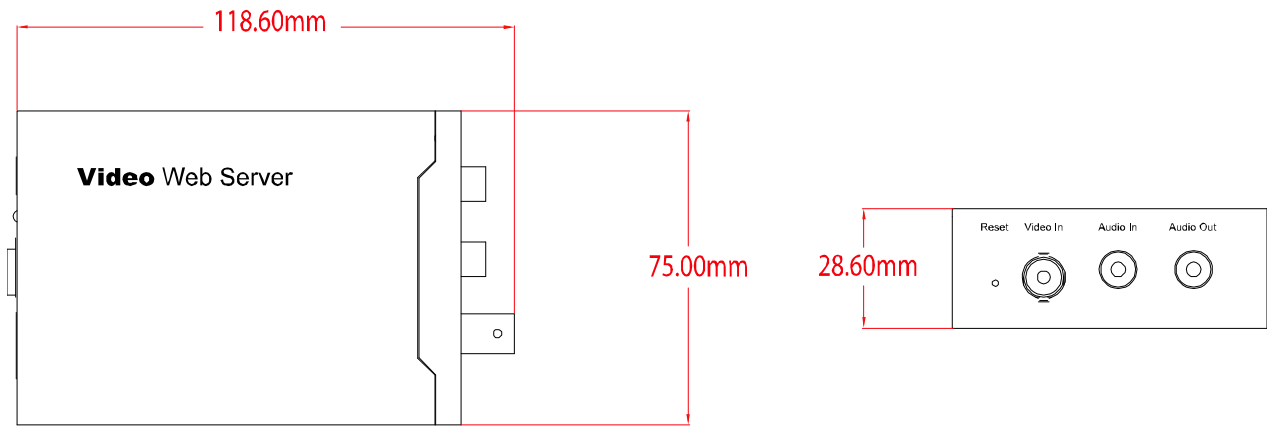
- Turn your traditional analog camera into a network camera, and allow users to view live images using a web browser or our CMS software
- Remote configuration and status checking
- Real-time H.264 / MPEG4 / MJPEG compression
- Motion detection and event notification functions
- Free CMS software with E-Map for multiple devices control & surveillance
- ONVIF standard supported to simplify system integration

1.2 Package content

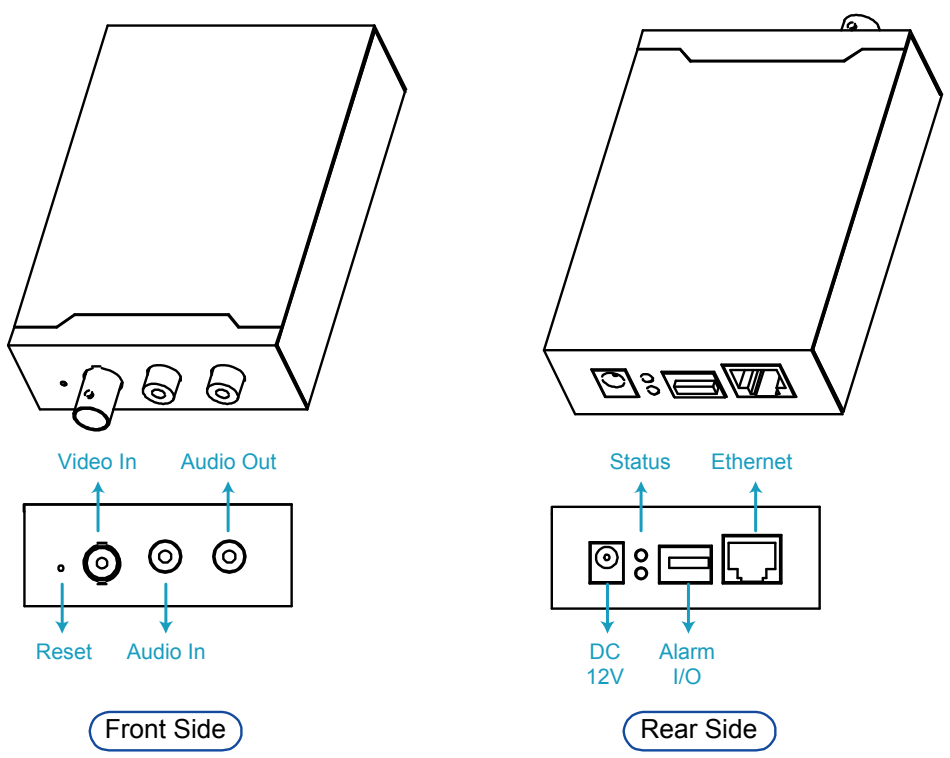
☐ 1CH Video Server ☐ Installation Guide

☐ Adapter ☐ CD-ROM disc (including user manuals & CMS software “Video Viewer”)

1.3 Dimensions



1.4 Product Overview



2. BEFORE USING YOUR DEVICE

This device can be accessed via our supplied CMS software “Video Viewer”, the web browser (such as “Microsoft Internet Explorer” or “Mozilla Firefox”), and smart phones with our self-developed program “EagleEyes” installed depending on different using situations.

Note: For details about accessing devices via smart phones, please refer to http://www.eagleeyescctv.com.

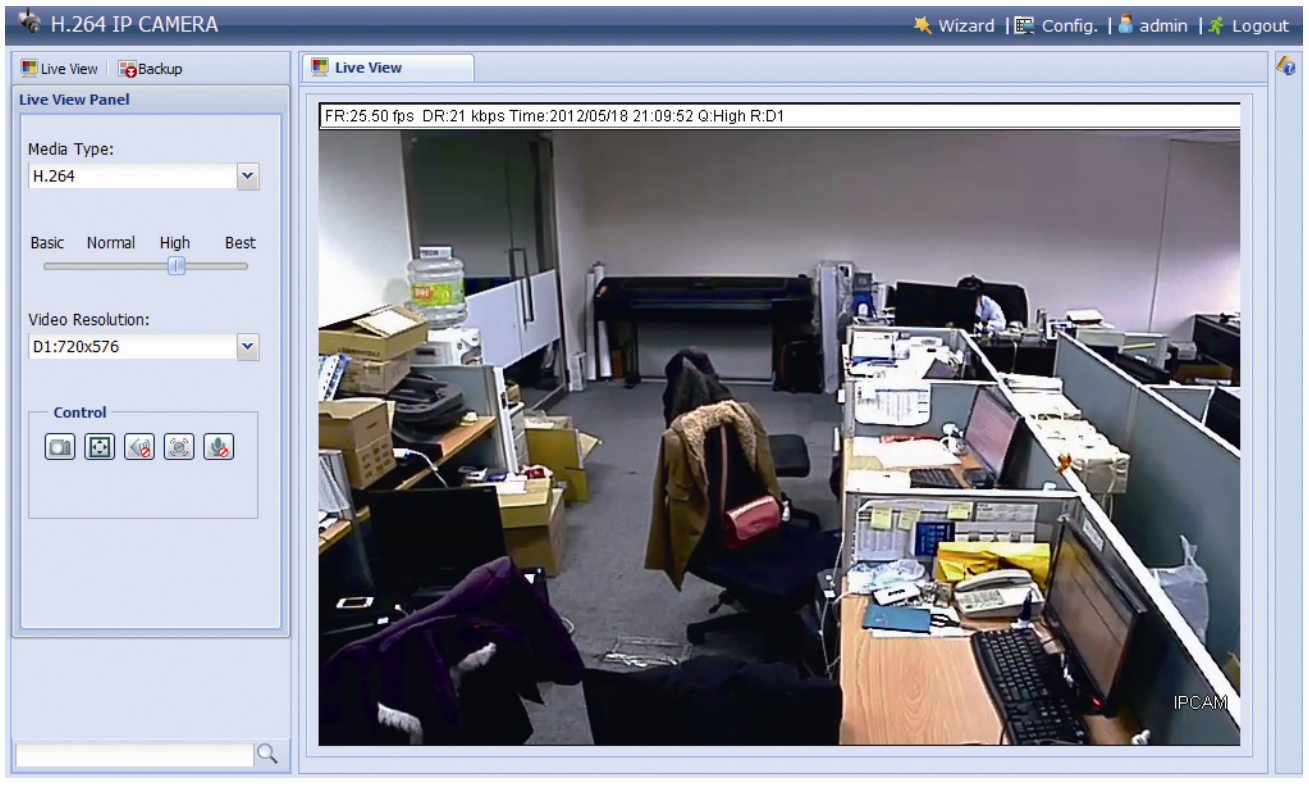
Before using the device, make sure:

1) You have installed the supplied CMS software, “Video Viewer”, or a web browser.
2) You have configured the network settings, and the network connection is fine.

For Video Viewer installation, please refer to “3.1 Installing Video Viewer” at page 3.
For network configurations, please refer to your installation guide.

- To check or configure up to 16 surveillance devices simultaneously with the record function, please use “Video Viewer”.
  For details about using Video Viewer, please refer to “3. ACCESSING THE CAMERA VIA VIDEO VIEWER” at page 3, and “4. CONFIGURATION” at page 12.

- To check or configure this device only, it’s recommended to use the web browser “Microsoft Internet Explorer” or “Mozilla Firefox”.
  For details about using the web browser, please refer to “4. CONFIGURATION” at page 12.

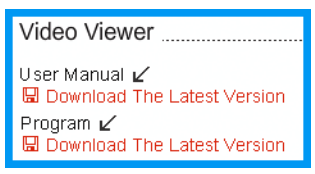


3. ACCESSING THE CAMERA VIA VIDEO VIEWER

3.1 Installing Video Viewer

Step1: Place the supplied CD into your CD-ROM or DVD-ROM drive. The program will be automatically run.

Step2: Click “Program” in the “Video Viewer” section to install Video Viewer, or click “Download The Latest Version” under “Program” to download the latest version of Video Viewer from the Internet (if your PC is connected to Internet).



Step3: Follow the on-screen instructions to finish the installation. When the installation is completed, a shortcut icon “ ” will be placed on your PC desktop.

3.2 Accessing the camera

Step1: Double-click “ ” on your PC desktop to open Video Viewer. By defaults, the “Address Book” panel will be displayed on the right side of the control panel.

Step2: In “Address Book”, click “ ” to key in the IP address, user name, password, and port number of the camera you intend to connect.

OR

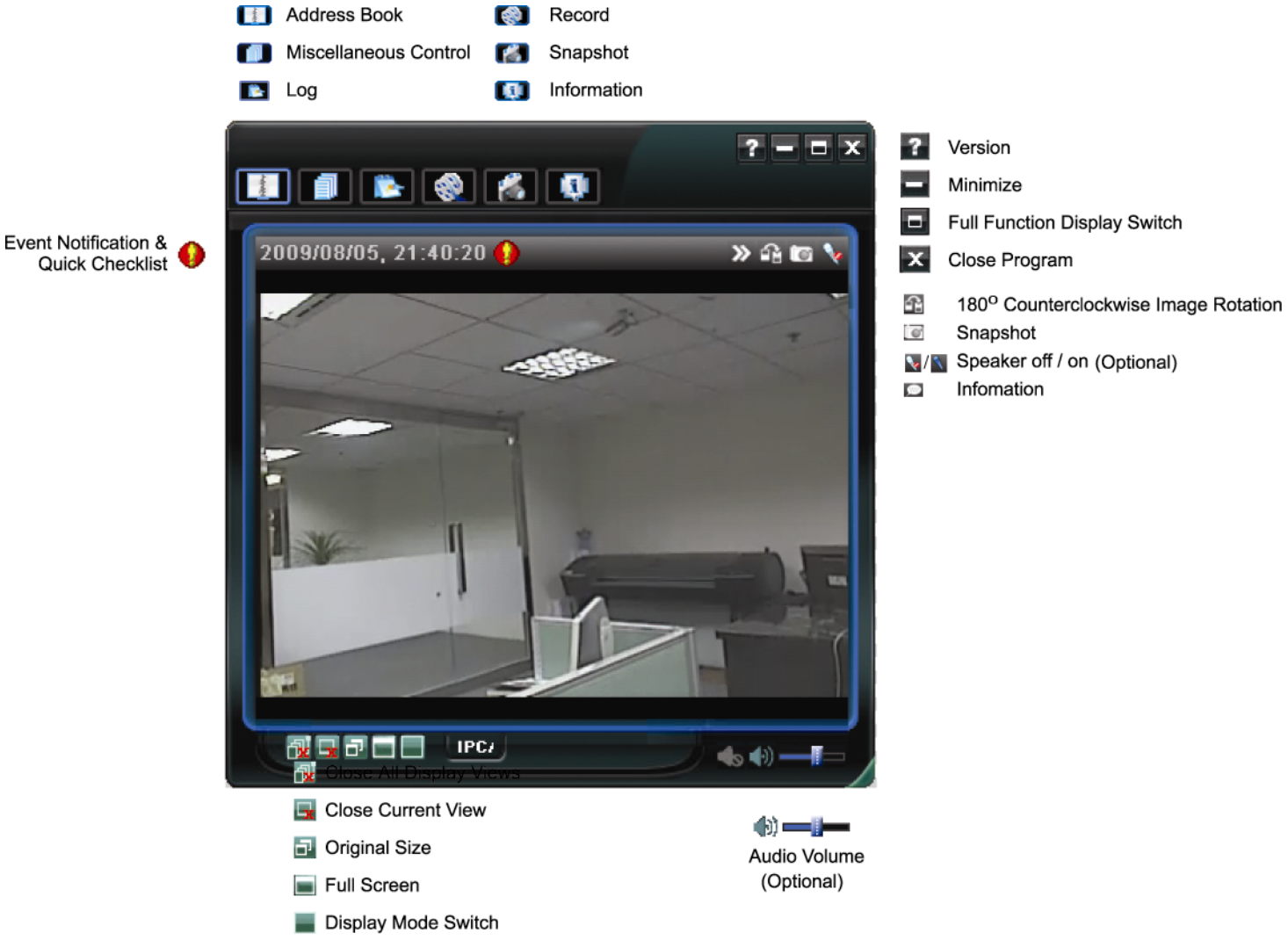
Click “ ” → “ ” to search the available IP address(es) of other camera(s) under the same domain as your PC’s IP address. The found address(es) will be listed, and can be added into the address book by clicking “ ”.

Step3: Double-click the IP address you just added into the address book to log in. The live view is displayed in the Video Viewer.

3.3 Control panel overview

Two control panels are available and can be switched depending on your using habit.

3.3.1 Simplified version (Default)



3.3.2 Full function version

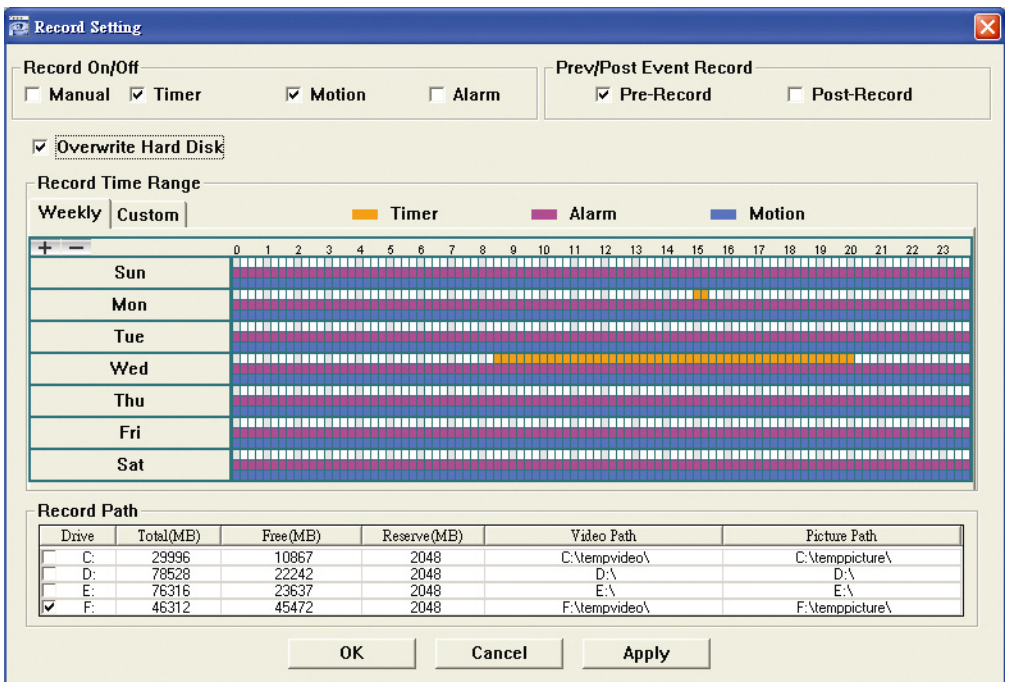
3.3.3 Main button overview

Button		Function	Description		
Simplified	Full Function				
		Address Book	Click to show the predefined IP address(es). You can add, remove or search the IP address to log in the DVR remotely.		
		Miscellaneous Control		Remote Config	Click to go to the detailed system configuration. For details, please refer to “4. CONFIGURATION” at page 12.
				Record Setting	Click to go to the detailed record setting. For details, please refer to “3.4.1 Record” at page 6.
				Custom Setting	Click to choose the language of this program, or set the password when activating this program. The changes will take effect when this program is closed and executed again.
		Log	Click to view all event and recording logs, search the desired log(s) by date, or playback the recording of the selected log.		
		Record / Record Stop	Click to start / stop the manual recording. The record button will be disabled when the reserved disk capacity set in “Record Setting” is larger than the current disk capacity. For details, please refer to “3.4.1 Record” at page 6.		
		Snapshot	Click to take a snapshot of the current view. The snapshot will be saved in the path you specified in “Record Setting”.		
		Information	Click to show the current network connection details.		

3.4 Frequently-used functions

3.4.1 Record

To record remotely, click “ ” or “ ” → “ ” to go to the “Record Setting” page.



In the “Record Setting” page, you can set the following items:

- Record type
- Pre- / post-event record time (0~10 seconds)
- Record time setting
- Record path

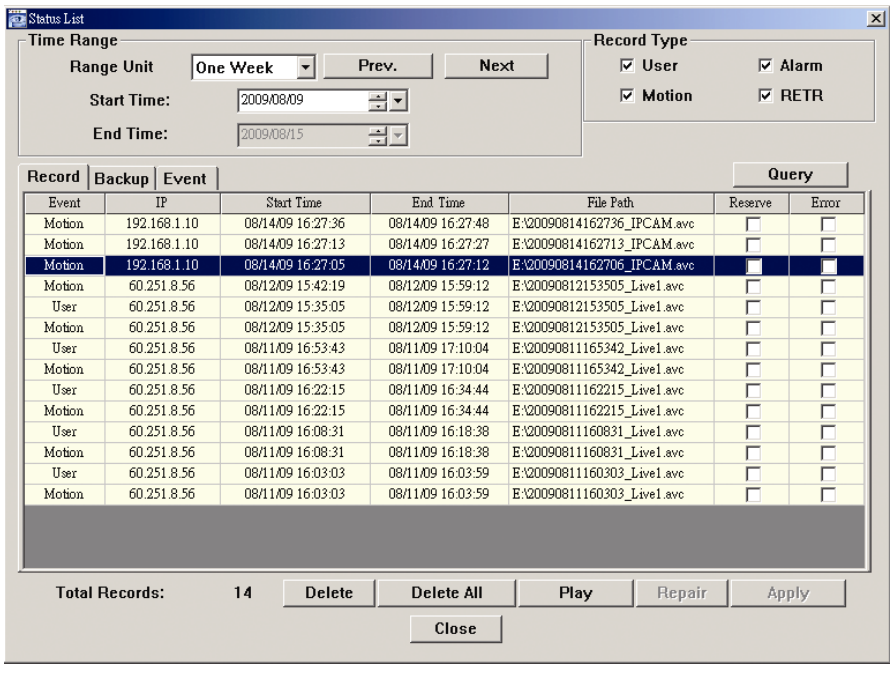
Note: The record function will be disabled when the reserved disk capacity in “Reserved(MB)” is larger than the current disk capacity in “Free(MB)”.

When “Manual” is checked, click “ ” or “ ” on the main control panel to start the manual recording immediately, and the recordings will be saved in the location specified in “Record Path”.

When “Motion” and / or “Alarm” are checked, the recording function will be enabled for any motion or alarm event, and the recordings will be saved in the location specified in “Record Path”.

3.4.2 Playback

To play a recording, click “ ” or “ ”, and select the “Record” tab. A list of all the recordings will be shown by defaults, and you can also sort out the logs you want to speed up the search time.



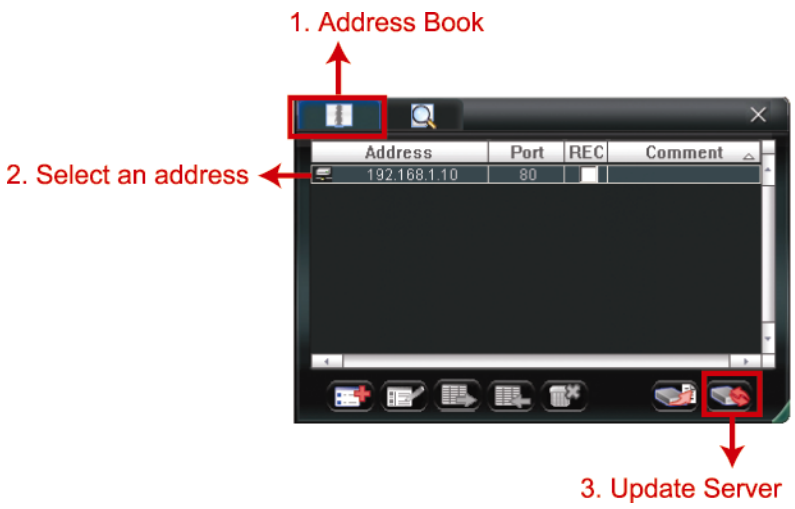
3.4.3 Firmware upgrade

This function is used when users need to upgrade the device for function scalability.

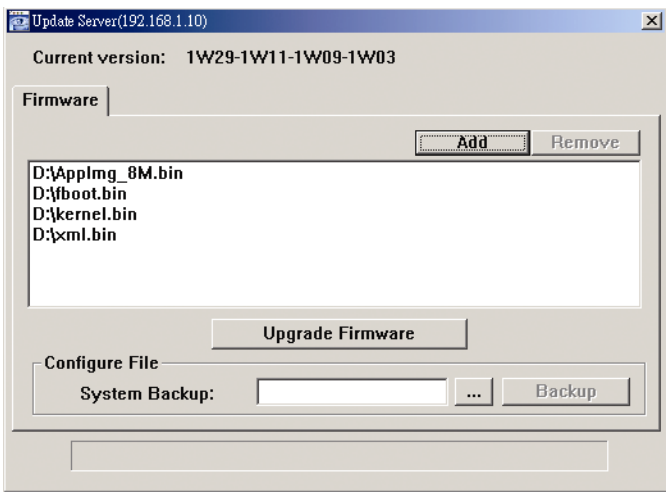
Note: Before using this function, make sure you have the correct upgrade files provided by your installer or distributor.

Step1: Click " ", and select the IP address of your device in the address book.

Step2: Click " " to show the upgrade page, "Update Server".



Step3: Click "Add" to browse to the upgrade files.



Step4: Click "Upgrade Firmware" to start firmware upgrade.

Note: It takes a few minutes to finish the upgrade process. Do not disconnect the power during firmware upgrade, or the upgrade may be failed. The device will reboot after the upgrade.

Step5: Select the IP address of the device and click " " again to check if the firmware is upgraded.

3.4.4 E-Map

Video Viewer is also a Central Management System (CMS) software, which allows network device control & management for up to 16 devices simultaneously.

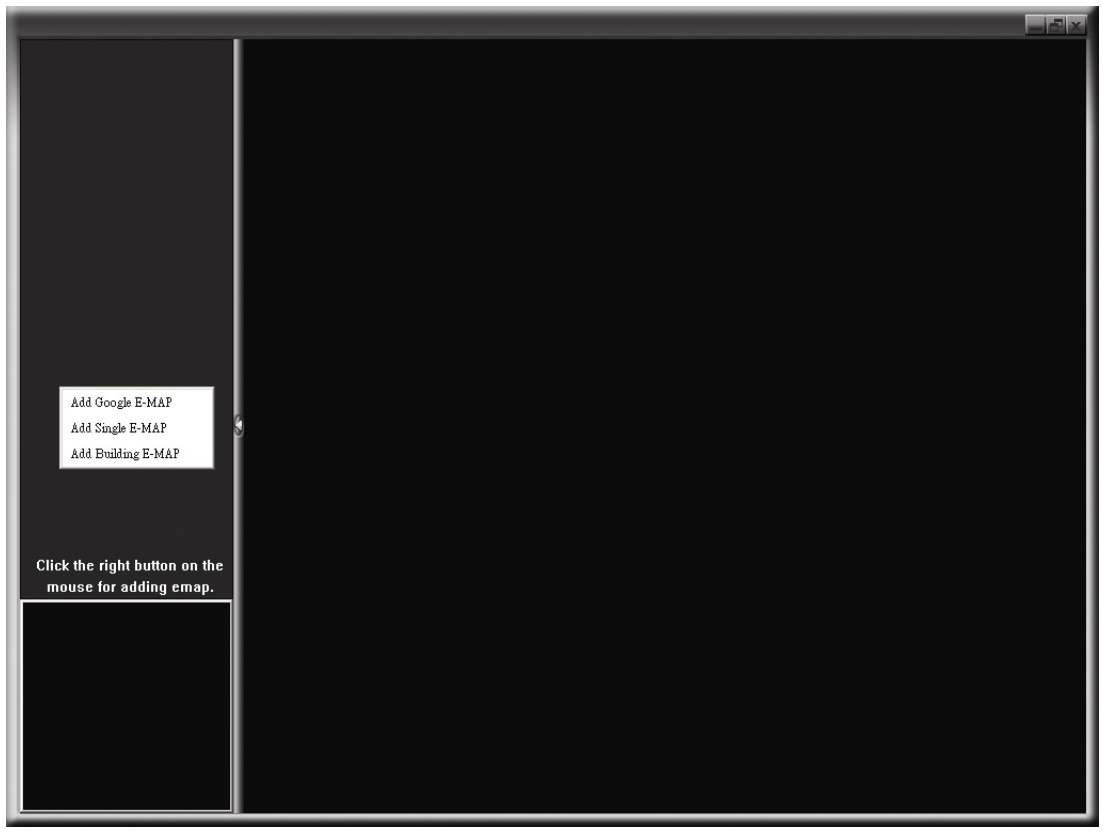
Note: Before using this function, make sure Video Viewer is connected to all the devices (up to 16) you want to monitor.

E-Map is **ONLY** available when the control panel is switch to the full function version.

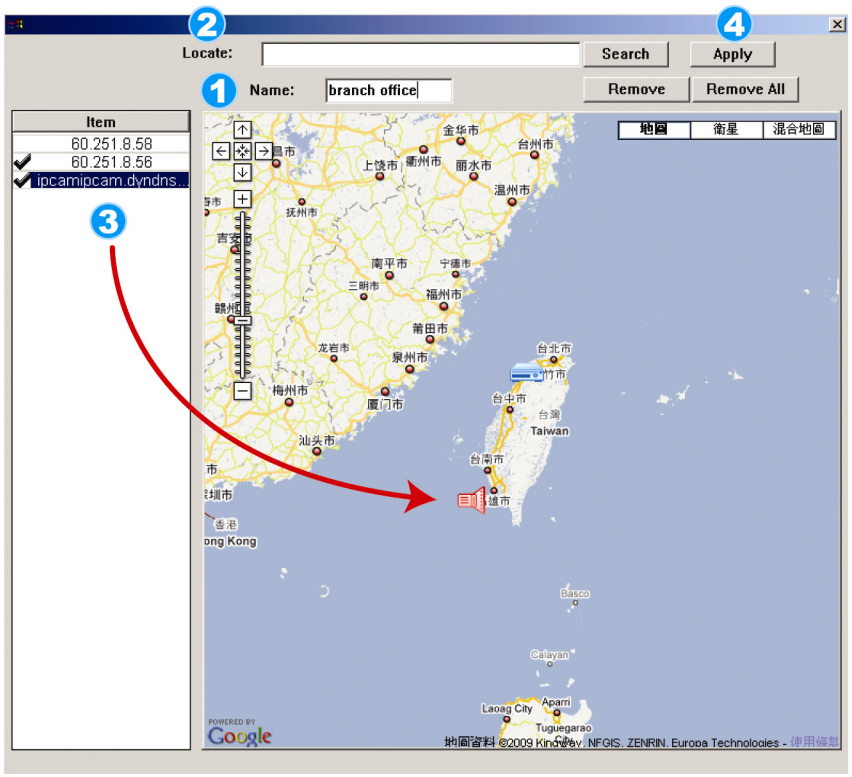
How to add an E-Map group

STEP1: In the simplified version, click " " to switch the control panel to the full function version, and click " " to enter the E-Map page as follows.

Note: To know where the buttons are, please refer to "3.3.1 Simplified version (Default) at page 4, and "3.3.2 Full function version" at page 5.

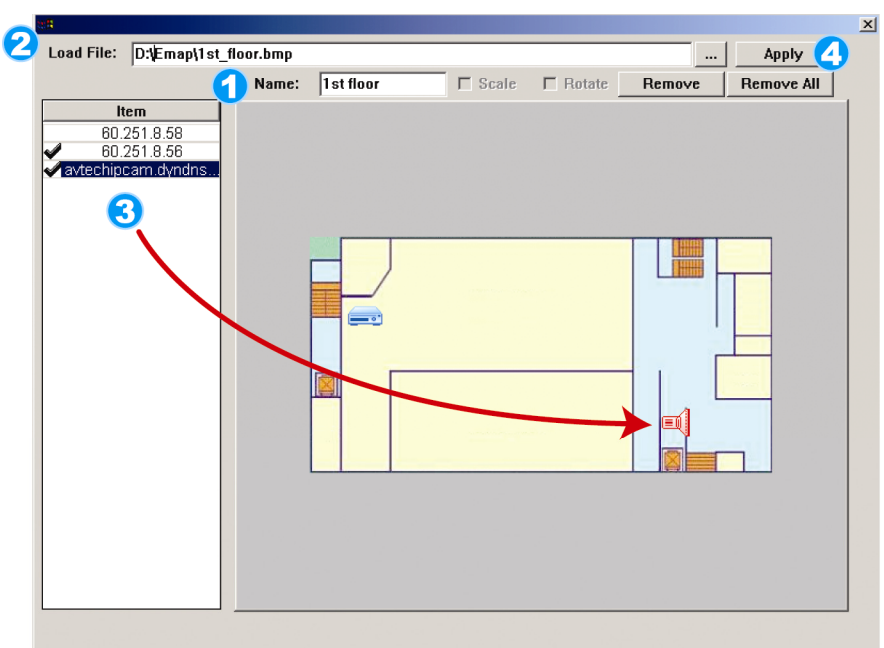


STEP2: Right-click to show the shortcut menu on the top-left panel, and select the E-Map group you want to add.
There are three E-Map groups you can add: Google E-MAP, Single E-MAP, and Building E-MAP.



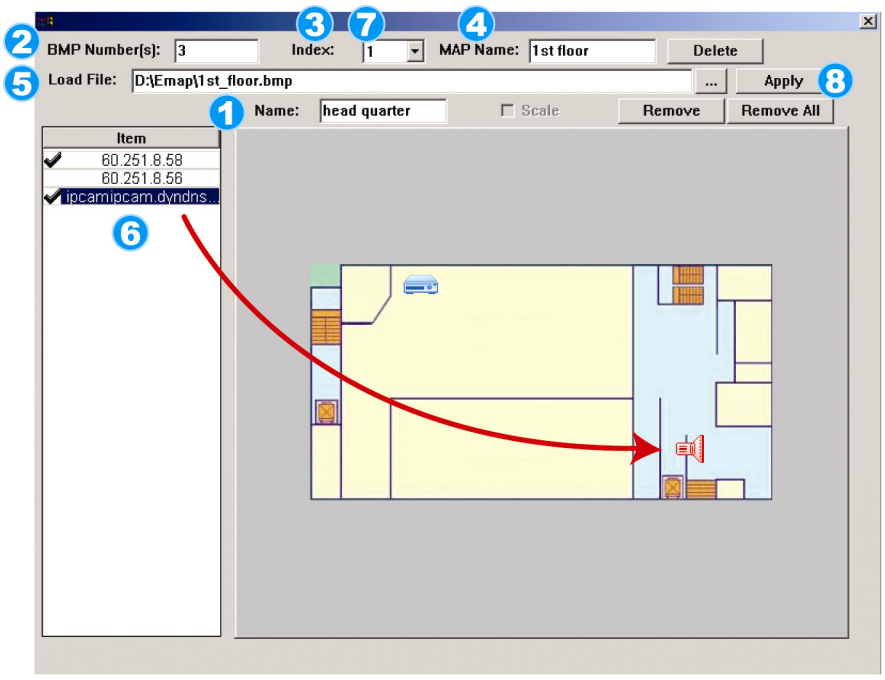
How to add a Google E-Map group:

1. Enter the name of this Google E-Map group.
2. Enter a specific address or landmark, and click “Search”.
   OR
   Move to the map and drag to the location you want.
3. Click and drag the IP address to where it’s located in the current level.
4. Click “Apply” to save and finish.



How to add a single E-Map group:

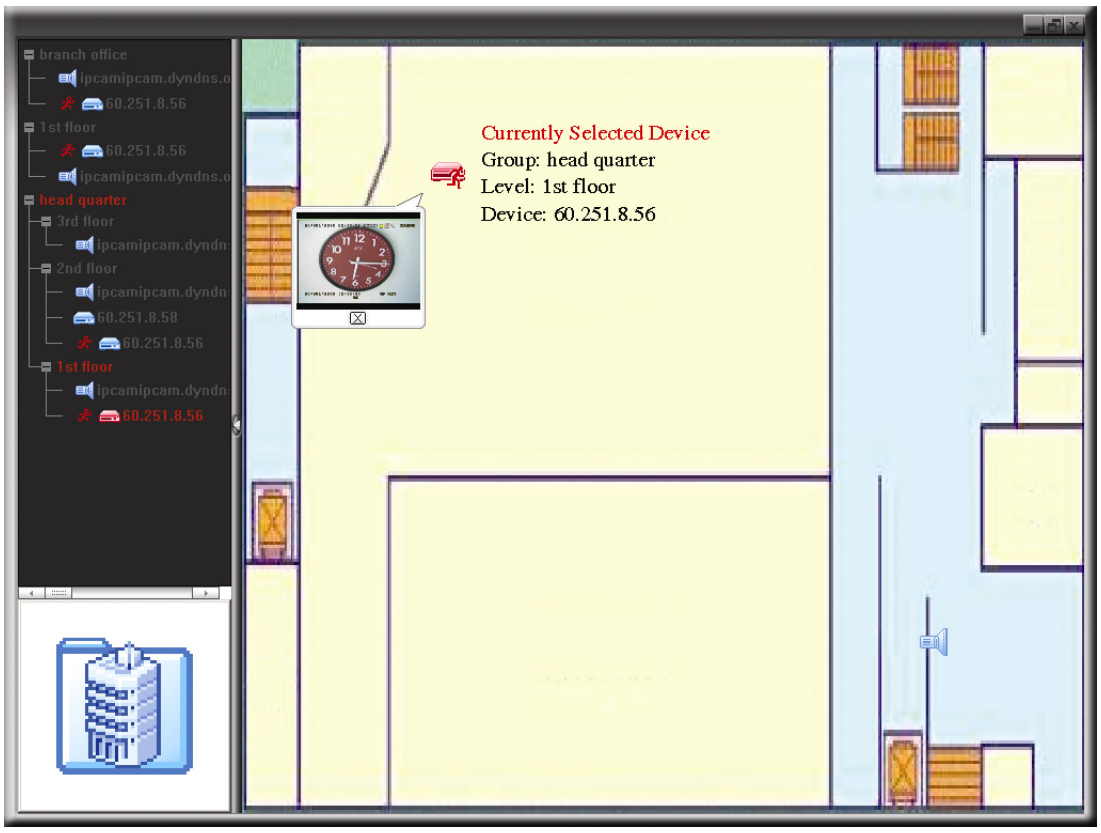
1. Enter the name of this single E-Map group.
2. Click “...” to browse the map file in BMP or JPEG.
3. Click and drag the IP address to where it’s located in the current level.
4. Click “Apply” to save and finish.



How to add a building E-Map group:

1. Enter the name of this building E-Map group.
2. Enter the total levels of this building.
3. Select the level of the building from the drop-down list.
4. Enter the name of the level.
5. Click "..." to browse the map file in BMP or JPEG.
6. Click and drag the IP address to where it's located in the current level.
7. Go back to STEP 3 to select other level of the building, and repeat from STEP 3 to 6 until the setup for all levels are finished.
8. Click "Apply" to save and finish.

STEP3: When the E-Map group is created, you will see the tree on the top-left panel, showing all the devices you've added to this group.



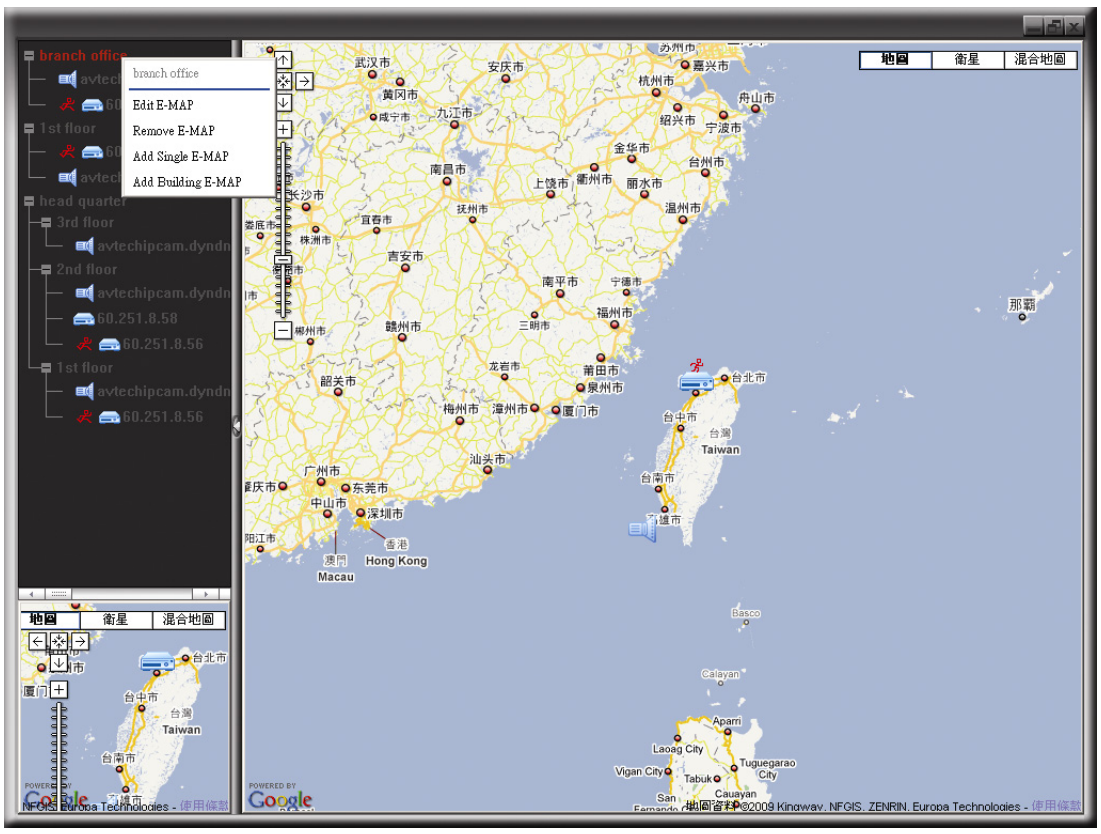
Icon	Description
	The connected device is camera. When it's selected, it will become red.
	The connected device is DVR. When it's selected, it will become red.
	For any motion or alarm event, it will appear on the screen to catch your attention. To know what's happening quickly, double-click the device icon on the E-Map to show the live view.

How to edit / remove an existing E-Map group

- For Google E-Map Group

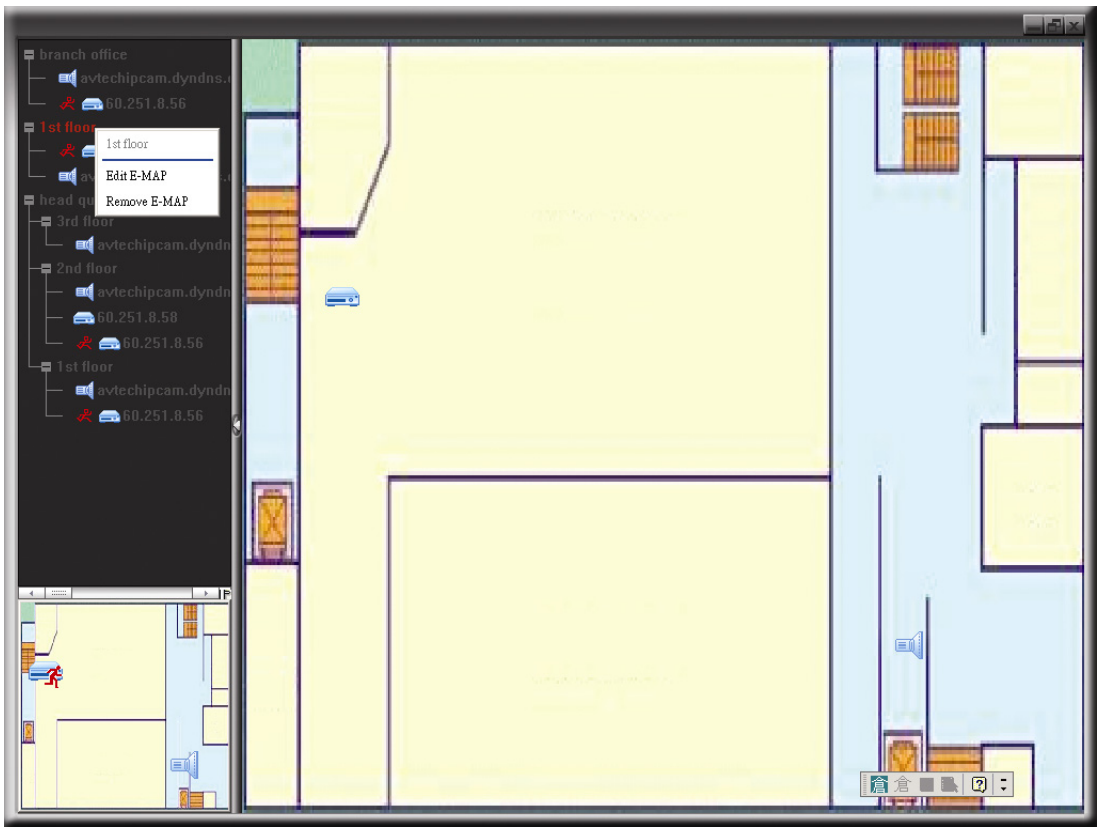
  Right-click on the group name to show the shortcut menu list, and select “Edit E-MAP” or “Remove E-MAP” as needed.

  You can also add a single E-Map group (Add Single E-MAP) or Building E-Map group (Add Building E-MAP) into the existing Google E-Map group.



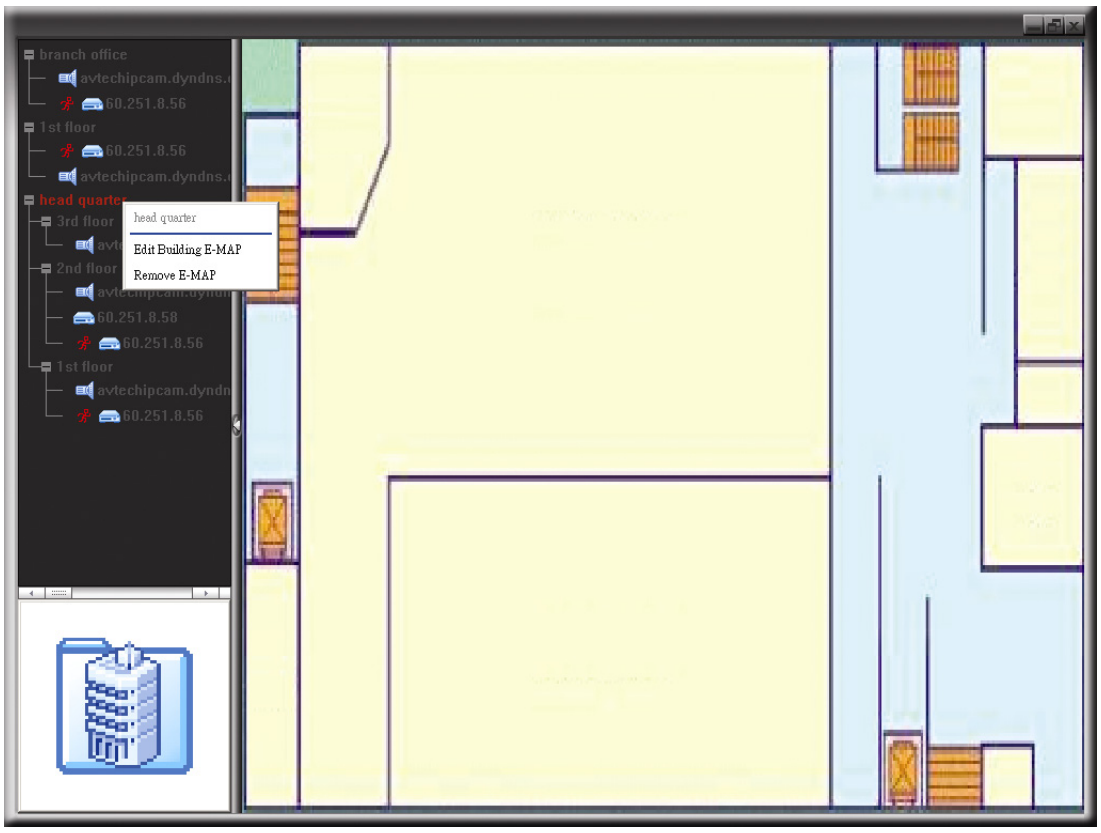
- For Single E-Map Group

  Right-click on the group name to show the shortcut menu list, and select “Edit E-MAP” or “Remove E-MAP” as needed.



➢ For Building E-Map Group

Right-click on the group name to show the shortcut menu list, and select “Edit Building E-MAP” or “Remove E-MAP” as needed.



4. CONFIGURATIONS VIA WEB BROWSER

Users can also access the camera connected to this device via a web browser, such as Microsoft Internet Explorer, Mozilla Firefox, Google Chrome and Safari.

Note: It's recommended to consult with your installer before changing system configurations.

Note: You need to be the supervisor to enter the system configuration page. If not, please re-log into the camera with the supervisor user level.

However, the web browser is only available for single device access. If users want to access more than two devices through one interface, it's recommended to use our supplied CMS software, Video Viewer. For details, please refer to "3. ACCESSING THE CAMERA VIA VIDEO VIEWER" at page 3.

Before using the device, make sure you have configured the network settings and have the IP address, user name and password used for accessing the camera in hand. If not, please refer to the installation guide.

4.1 Accessing the camera

Step1: Open your web browser, and key in http://*ipaddress*:*portnum* in the URL address box.

For example, for IP address 60.121.46.236 and port No. 888, please key in "http://60.121.46.236:888" into the URL address box, and press "Enter".

Step2: In the login page, key in the user name and password, and enter the security code from the image below if any. Then, click "LOGIN".

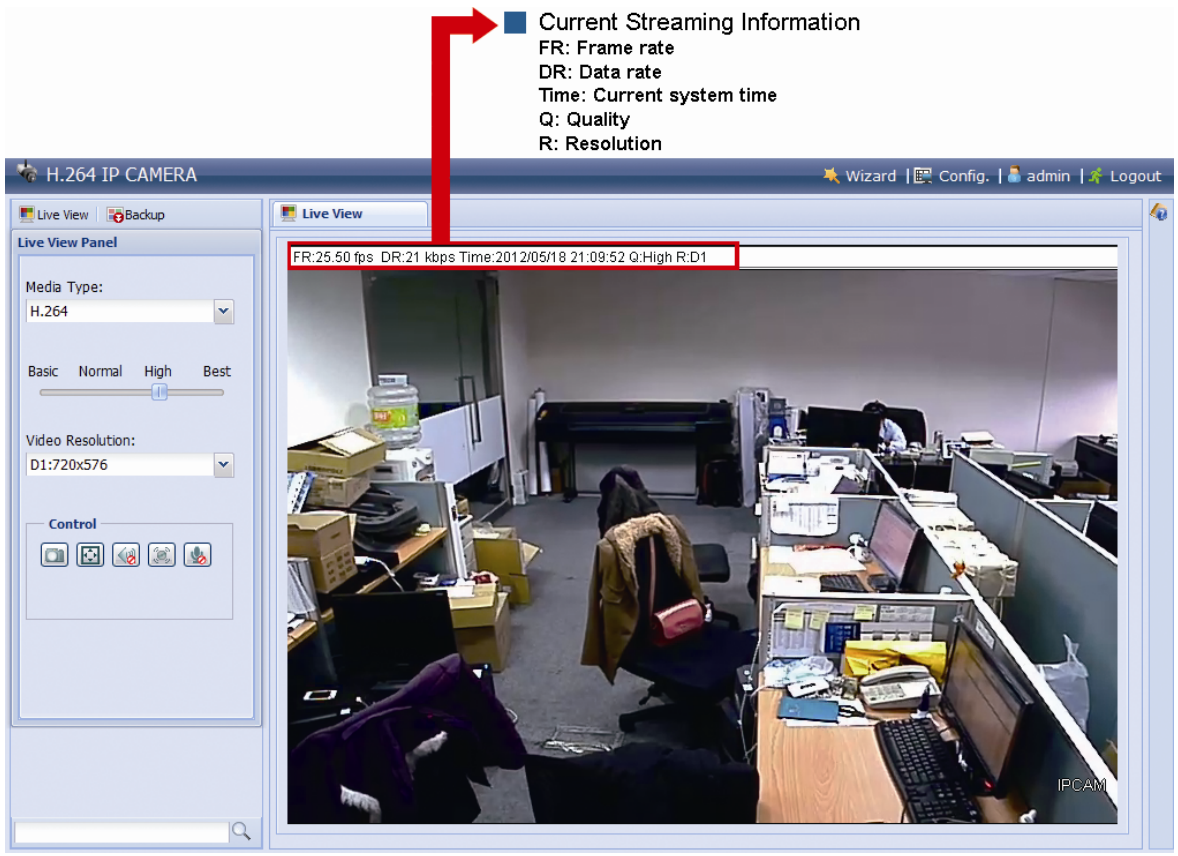
Step3: The wizard is then started.

- To skip the wizard and directly access the camera live view, click "Close".
- To directly access the camera live view without starting the wizard for the login next time, check "Do not start wizard at login".

Step4: When the login is successful, the live view is shown.

4.2 Control panel overview

Note: The buttons available depend on the web browser you're using, and the user level used to log in.

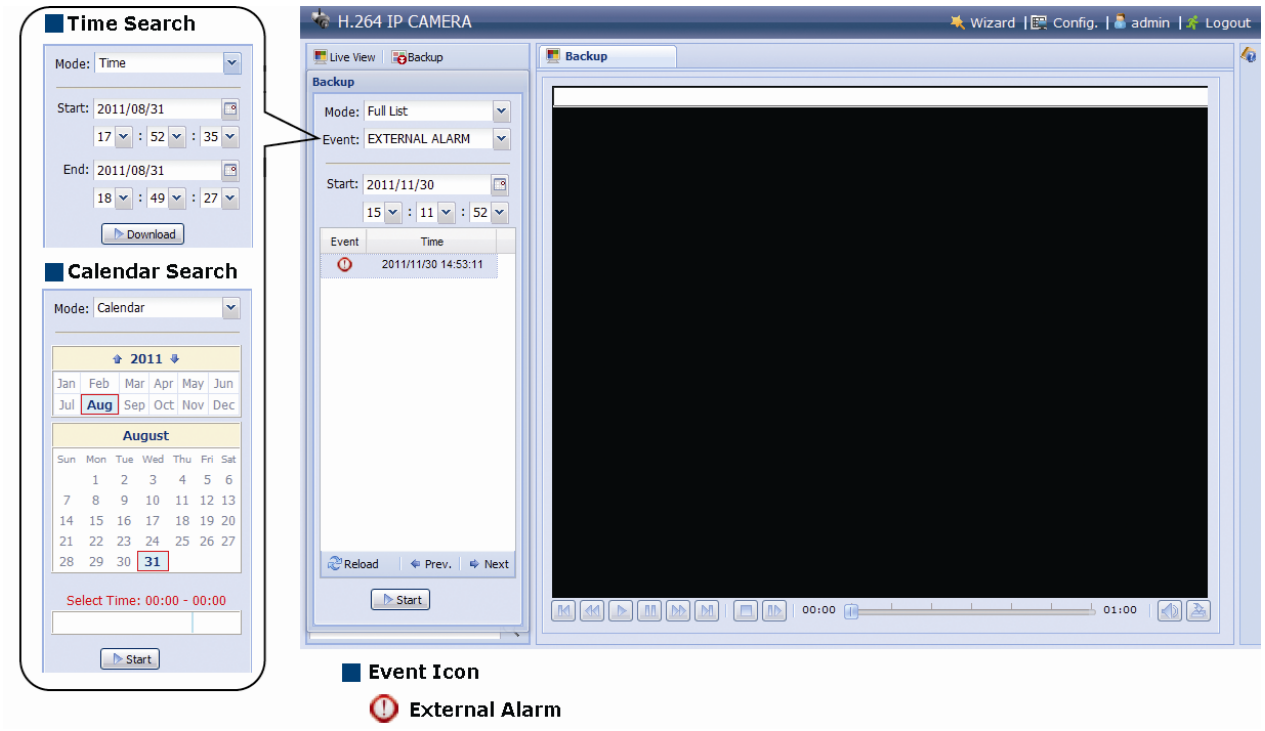


Function	Icon	User Level	Description
Live		Supervisor / Power User / Normal User / Guest	Switch to the live view page.
Backup		Supervisor / Power User	Enter the event record list for video playback. For details, please refer to "4.3 Event Record Search & Playback" at page 14.
Config.		Supervisor	Switch to the system configuration page For details, please refer to "4.5 System configuration menu" at page 15.
Media Type	--	Supervisor / Power User / Normal User / Guest	Select the web transmission format from the drop-down list: ■ H.264 / MPEG-4 / Motion JPEG ■ QuickTime QuickTime is Apple Inc.'s multimedia software. You need to have QuickTime installed in your operating system before selecting "QuickTime". When it is selected, you will be promoted to enter the user name and password to access the camera. ■ VLC
Video Quality	--	Supervisor / Power User / Normal	Click & drag the slider to select the video quality: BASIC / NORMAL / HIGH / BEST.
Video Resolution	--	Supervisor / Power User / Normal	Select the video resolution from the drop list: D1 / CIF.
Snapshot		Supervisor / Power User / Normal User	Click to take a snapshot of the current view, and save to the location specified in "Configuration" → "Camera" → "Camera" → "Snapshot Path".
Full Screen		Supervisor / Power User / Normal User	When "D1" is selected, click to display the image in full screen. To exit the full screen mode, press "Esc" on your keyboard.
Double Size		Supervisor / Power User / Normal User	When "CIF" is selected, click to enlarge the CIF size to D1 size.
Audio On / Off	/	Supervisor / Power User / Normal User	Click to switch the audio on / off.
Alarm Out		Supervisor / Power User / Normal User	Click to force your alarm device to work, and the icon will turn to red. For example, when your alarm device is a buzzer, click this button and your buzzer will start to sound even if there's no alarm event. *Note: Before using this function, make sure your alarm device is connected properly to this camera and also configured well in "Config." → "Trigger" → "Trigger".*
Speaker On / Off	/	Supervisor	Click to switch the speaker on / off when a speaker is connected to the audio output of this device.

4.3 Event Record Search & Playback

This camera can only save up to three alarm recordings.

Note: To save more recorded data, it's recommended to use this device with the compatible NVR.



/	Previous / Next Hour	Click to jump to the next / previous time interval in an hour, for example, 11:00 ~ 12:00 or 14:00 ~ 15:00, and start playing the earliest event video clip recorded during this whole hour.
	Fast Forward	Increase the speed for fast forward. Click to get 2X, 4X, 8X & 16X speed forward eventually.
	Fast Rewind	Increase the speed for fast rewind. Click to get 2X, 4X, 8X & 16X speed rewind eventually.
	Play	Click to play the current video clip.
	Pause	Click to pause the video playback.
	Stop	Click to stop the video playback.
	Step	In the pause mode, click to get one frame forward.
	Audio	Click to mute the playback if necessary, and click again to restore.
	Download	Click to download the current video clip to the specified path in your PC. *The downloaded video can only be opened by our own video player. Please go to "General" → "Maintenance" to download the video player, or get the player from the CD supplied with the sales package.*

4.5 System configuration menu

Click “Config.” to enter the configuration page.

The functions are categorized into six menus: Network, Camera, Record Timer, Storage, Trigger and General.

- For details about “Network”, please refer to “

Main Menu	Sub-Menu	Reference
Storage	Memory	Check the current storage capacity and clear all recorded data when needed.
Trigger	Trigger	1. Enable / disable motion and alarm detection. 2. Set the motion detection area. 3. Configure how the camera reacts for any event.
General	General	1. Select the language of the web browser. 2. Check the MAC address of the camera. 3. Lock camera access after the specified time.
	Time	Set daylight saving time and the current time.
	Server Log	Check the system event logs.
	Online	Check the current online user(s).
	Account	1. Create a new user account with different access privilege. 2. Modify or delete an existing user account.
	Google Maps	Allow you to know where the network camera is.
	Maintenance	1. Check the current firmware version and upgrade your camera. 2. Copy system configurations. 3. Reboot the camera. 4. Download the video player to play the recorded data.

4.6 Network” at page 17.

- For details about “Camera”, please refer to “4.7 Camera” at page 22.
- For details about “Record”, please refer to “4.8 Record” at page 23.
- For details about “Storage”, please refer to “4.9 Storage”’ at page 24.
- For details about “Trigger”, please refer to “4.10 Trigger” at page 24.
- For details about “General”, please refer to “4.11 General” at page 26.

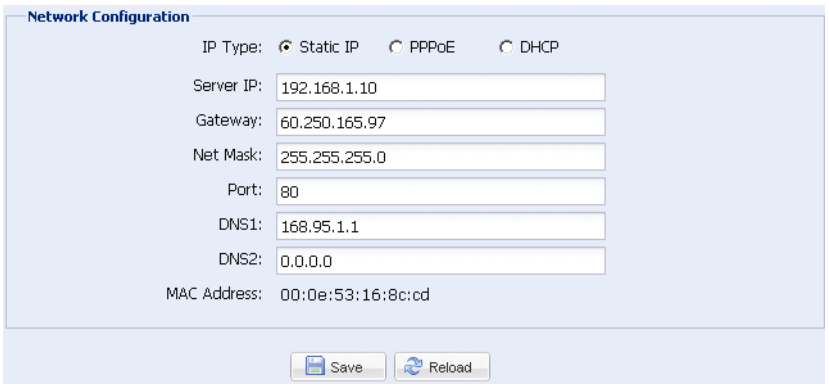
Main Menu	Sub-Menu	Reference
Network	Network	Configure network settings.
	QoS	Limit the data flow for live streaming.
	DDNS	Enter DDNS information when the network type is PPPOE or DHCP.
	SNTP	Synchronize your camera time with the networked computer systems.
	FTP	Enter the FTP information for event notifications when “FTP” is chosen in “Trigger” → “Trigger”.
	Mail	Enter Email information for event notifications when “Email” is chosen in “ Trigger ” → “Trigger”.
	SMS	Enter text messaging information for SMS notifications when “SMS” is chosen in “ Trigger ” → “Trigger”.
	Filter	Choose to permit or block the IP address(es) which can access this camera.
	UpnP	**Suitable for Windows-based operating system.* 1. Allow this camera to be detected among devices within the same network area for easy and quick usage. 2. Configure port mapping.
	Bonjour	**Suitable for Apple Mac-based operating system.* Allow this camera to be detected among devices within the same network area for easy and quick usage.
	RTP	Set the parameters for video data transmission when you’re using multimedia other than web broswers and Video Viewer for remote access.
Camera	Camera	1. Rename the camera. 2. Change the place where the camera name is shown on the screen.
	Video	Adjust video-related settings in different video format.
	Color	Adjust the color performance.
	Time	Set daylight saving time and the current time.
	Device	Set the camera type to “PTZ” if the connected camera if a PTZ camera.
Record	Record	Configure the record function.
	Record Timer	Schedule external alarm recording.

Main Menu	Sub-Menu	Reference
Storage	Memory	Check the current storage capacity and clear all recorded data when needed.
Trigger	Trigger	1. Enable / disable motion and alarm detection. 2. Set the motion detection area. 3. Configure how the camera reacts for any event.
General	General	1. Select the language of the web browser. 2. Check the MAC address of the camera. 3. Lock camera access after the specified time.
	Time	Set daylight saving time and the current time.
	Server Log	Check the system event logs.
	Online	Check the current online user(s).
	Account	1. Create a new user account with different access privilege. 2. Modify or delete an existing user account.
	Google Maps	Allow you to know where the network camera is.
	Maintenance	1. Check the current firmware version and upgrade your camera. 2. Copy system configurations. 3. Reboot the camera. 4. Download the video player to play the recorded data.

4.6 Network

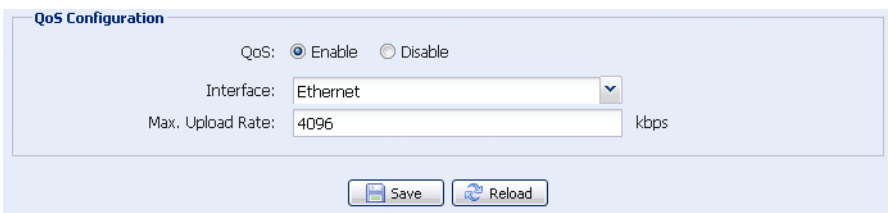
4.6.1 Network

You can set the network configuration of the device depending on your network type. For details, please refer to your installation guide.



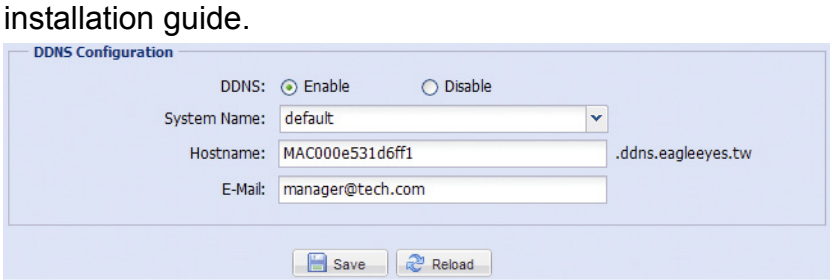
4.6.2 QoS

QoS, Quality of Service, is the ability to control the data flow for real-time streaming. This function is important if your network bandwidth is insufficient and you have other devices to share the network bandwidth.
Check “QoS Enable”, and set the max. upload rate from 256 to 10240 kbps.



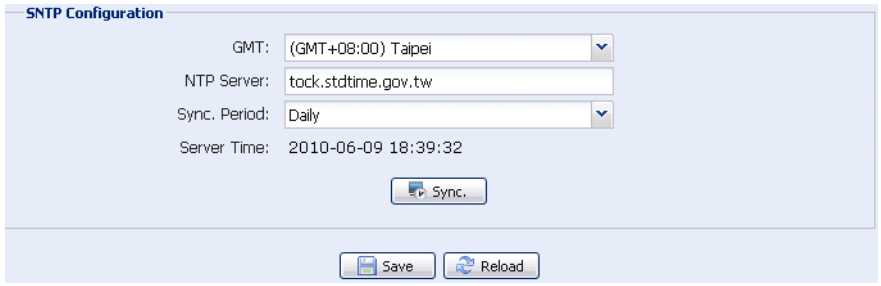
4.6.3 DDNS

Select “On” when the selected network type in “Network” is “PPPOE” or “DHCP”. For details, please refer to the installation guide.



4.6.4 SNTP

SNTP (Simple Network Time Protocol) is used to synchronize your camera time with the networked computer systems.



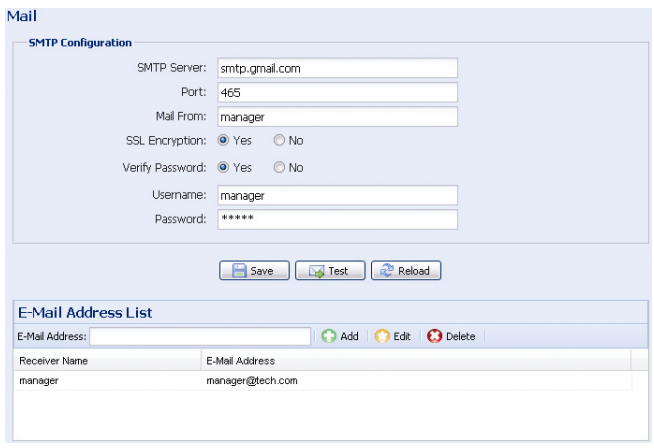
Function	Description
GMT	Once users choose the time zone, the device will adjust the local area time of the system automatically.
NTP Server	Simply use the default SNTP server (For example, tock.stdtime.gov.tw) or change to another server with which users are familiar.
Sync. Period	Select “Daily” to synchronize the camera time with the network time every day or “None” to turn off this function.
Server Time	Click and the device will synchronize the time with the network time.

4.6.5 FTP

Enter the detailed FTP information and click “Save” to confirm. The information you set here will be applied when “FTP” is selected in “General” → "Trigger".

4.6.6 MAIL

Enter the detailed e-mail information and click “Save” to confirm. The information you set here will be applied when “Email” is selected in “General” → "Trigger".



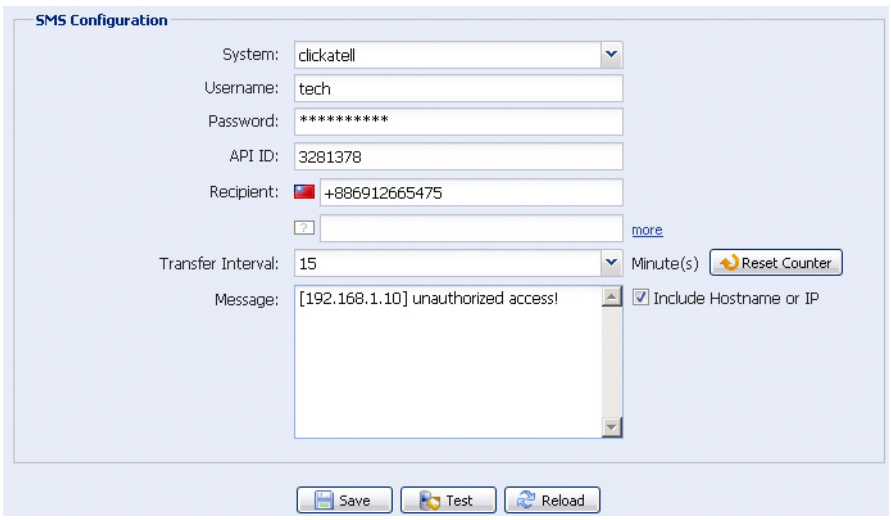
Function	Description
SMTP Server	Enter the SMTP server address provided from your e-mail system supplier.
Port	Enter the port number provided from your e-mail system supplier. If this column is left blank, the e-mail server will use port 25 to send e-mails.
Mail From	Enter the entire mail address to ensure e-mails will not be blocked by SMTP.
SSL Encryption	Select “Yes” if your e-mail server is using SSL encryption to protect your e-mail content from unauthorized access.
Verify Password	Some mail servers are required to verify the password. Please enter the “user name” and “password”.
E-Mail Address List	Add the e-mail address(s) of the assigned recipient(s).

Function	Description
Test	When all information is entered, click “Test Mail” to try if the recipe.

4.6.7 SMS

Note: Before using this function, you need to apply an API ID from the mobile messaging company, Clickatell, and you will be charged starting from the 11th message. For details, please refer to “APPENDIX 2 API ID APPLICATION FOR SMS MESSAGING’ at page 32.

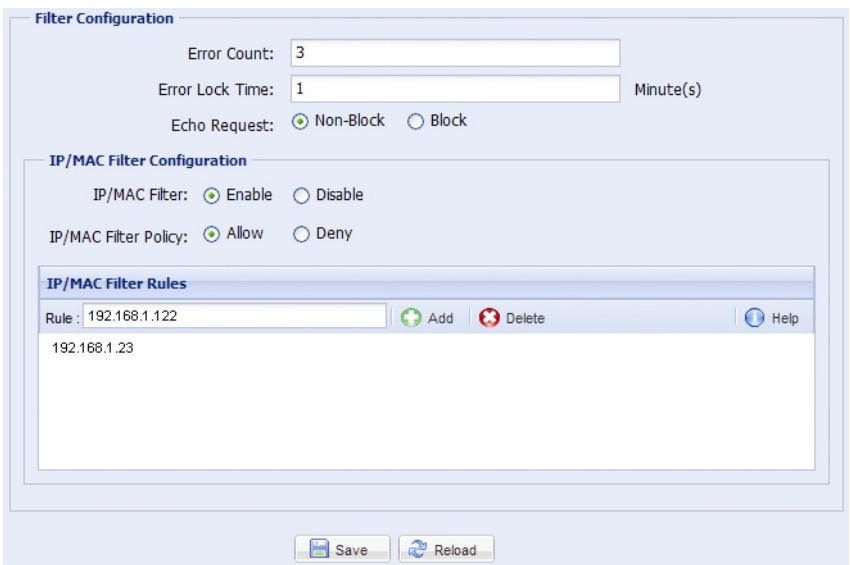
Enter the detailed information needed for text messaging, and click “Save” to confirm. The information you set here will be applied when “SMS” is selected in “General” → "Trigger".



Function	Description
System	The text messaging service provider is Clickatell.
User name / Password	Enter the account user name and password you created in Clickatell.
API ID	Enter the API ID you applied from Clickatell.
Recipient	Click “Add” to enter the phone number, including the country code, to receive the text message. Five sets of phone numbers are allowed.
Transfer Interval	Set the interval time in minutes between two-message sending. The options are 0, 15, 30 & 60.
Reset Counter	Click to restart the text messaging, and the SMS will be sent after the specified time interval since you click this button.
Message	Enter the text content (up to 70 characters) you want to send with the text message.
Test SMS	To know whether your SMS setting is correct, click this button to immediately send a SMS to your phone. Note: This testing is not free and you will be charged for SMS sending base on your local rate.

4.6.8 Filter

Choose to permit or block the IP address(es) which can access this camera, and click “Save” to confirm.



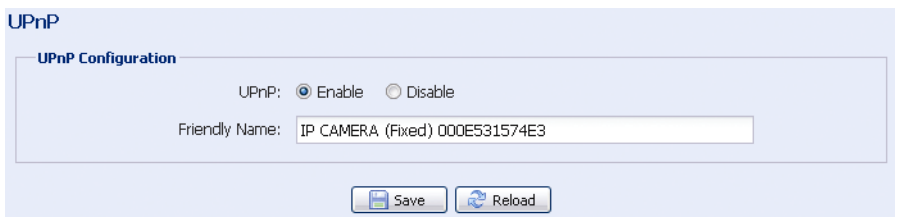
Function	Description
■ **Filter Configuration**	
Error Count	Set the maximum count for login failure. When the maximum count is reached, the IP address trying to access the device will be locked.
Error Lock Time	Set the lock time in minutes when the maximum count of error login for an IP address is reached.
Echo Request	Select “Non-Block” to allow other users to use the ping command to detect the IP address of your device, or “Block” to deny the ping command request.
■ **IP/MAC Filter Configuration**	
IP/MAC Filter	Choose to enable or disable the filter function.
IP/MAC Filter Policy	If “Enable” is selected, choose whether you want to permit (Allow) or block (Deny) the IP address list below.
■ **IP/MAC Filter Rules**	
Rule	• To add an item to the IP address list, key in the IP address in “Rule”, and click “Add”. • To remove an existing item in the IP address list, click the item you want to remove, and click “Delete”.

4.6.9 UPnP / Bonjour

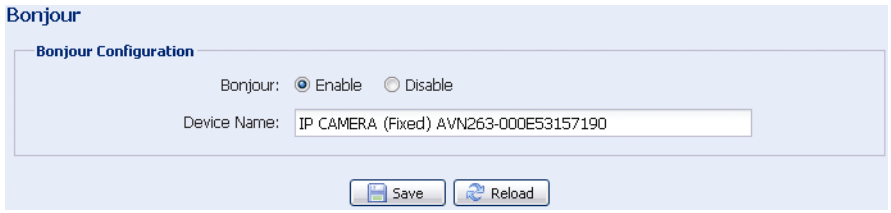
“UPnP” stands for “Universal Plug and Play”, which allows devices to connect seamlessly in the home and corporate environments and simplify installation of computer components, and is only suitable for Microsoft Windows-based operating system.

“Bonjour” functions the same as “UPnP”, but it’s only suitable for Apple Mac-based operating system.

➢ **UPnP**



➢ **Bonjour**



Check “Enable” to allow the network camera to be detected among devices within the same network area, and set the identification name of the camera in “Friendly name”.

When this function is activated, the other PC within the same domain as this camera will be able to search this camera in:

➢ “Network Neighbor” with the identification name set in “Friendly name” for Windows-based PC, or

➢ “” (finder) or “Bookmark” with the identification name set in “Device Name” for Mac-based PC.

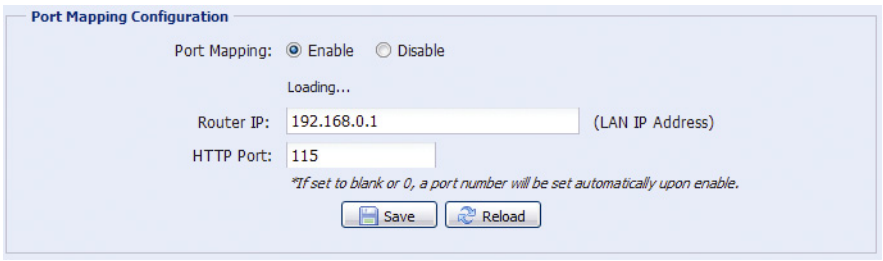
Double-click it to quickly open the web browser for camera access.

Port Mapping (Available only in UPnP)

When your device is connected to Internet via a router and you need to additionally access the router to configure port mapping, this function can eliminate the need to additionally access the router for port forwarding.

Note: Before using this function, make sure the UPnP function of your router is also enabled.

When “Port Mapping” is set to “Enable”, the system will automatically assign an IP address or port number for you if no IP address or port number is entered.


Port Mapping Configuration
Port Mapping: Enable Disable
Loading...
Router IP: 192.168.0.1 (LAN IP Address)
HTTP Port: 115
*If set to blank or 0, a port number will be set automatically upon enable.
Save
Reload

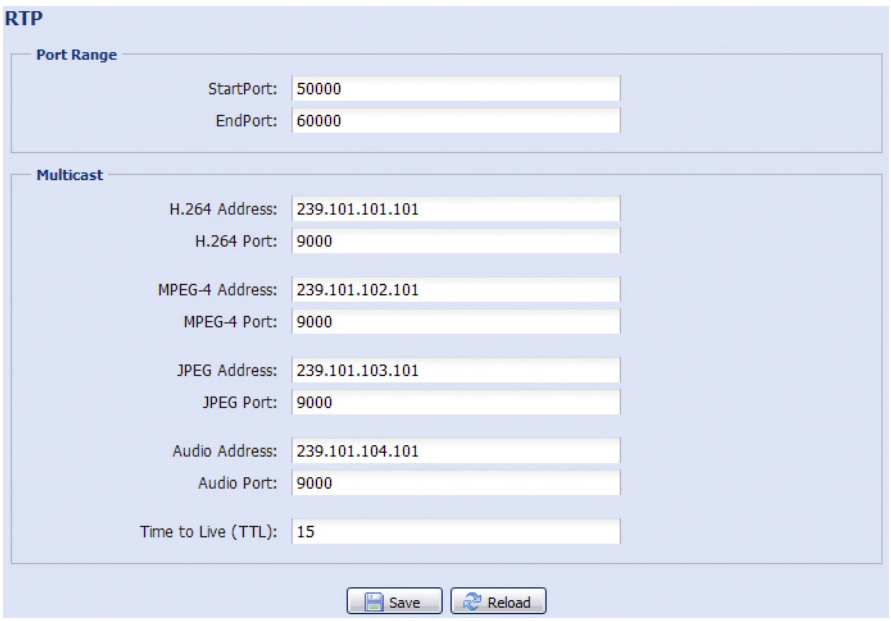
Note: When the configurations are saved successfully, you'll see a message indicating the IP address and port number assigned to your device.

4.6.10 RTP

The Real-time Transport Protocol (RTP) is an Internet protocol standard to manage the real-time transmission of multimedia, such as VLC player.

The media player you want to use for remote access must support RTP transmission for this function to work normally.

Note: When you're about to end the remote access, please press the stop button on your media player first, and then close the program. This is to ensure the server receives the stop command, and also help to protect the server from redundant data transmission.

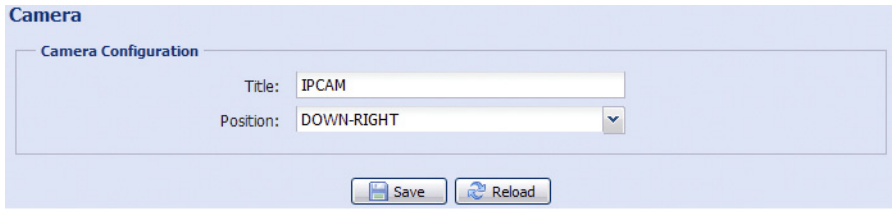


Function	Description
■ **Port Range** The port range used by RTP is limited, and preserving 100 ports between the start port and end port is necessary.	
Start Port	The range of the start port is 1024 ~ 65434.
End Port	The range of the end port is 1124 ~ 65534.
■ **Multicast**	
Address and port for H264 / MPEG-4 / JPEG transmission	Set a specific address and port for multicast of each stream format (H264/ MPEG4/ JPEG). The range of the address is limited between 224.0.0.1 ~ 239.255.255.255. The port for multicast must be an even number.
Address and port for audio transmission	Set a specific address and port for multicast of audio. The range of the address is limited between 224.0.0.1 ~ 239.255.255.255. The port for multicast must be an even number.
Time to Live (TTL)	The range of Time to Live of the package is between 1 ~ 255. As soon as Time to Live of the package is 0, it will be dropped.

4.7 Camera

4.7.1 Camera

Rename the camera, and change the place where the camera name is shown on the screen, UP-LEFT / UP-RIGHT / DOWN-LEFT / DOWN-RIGHT.

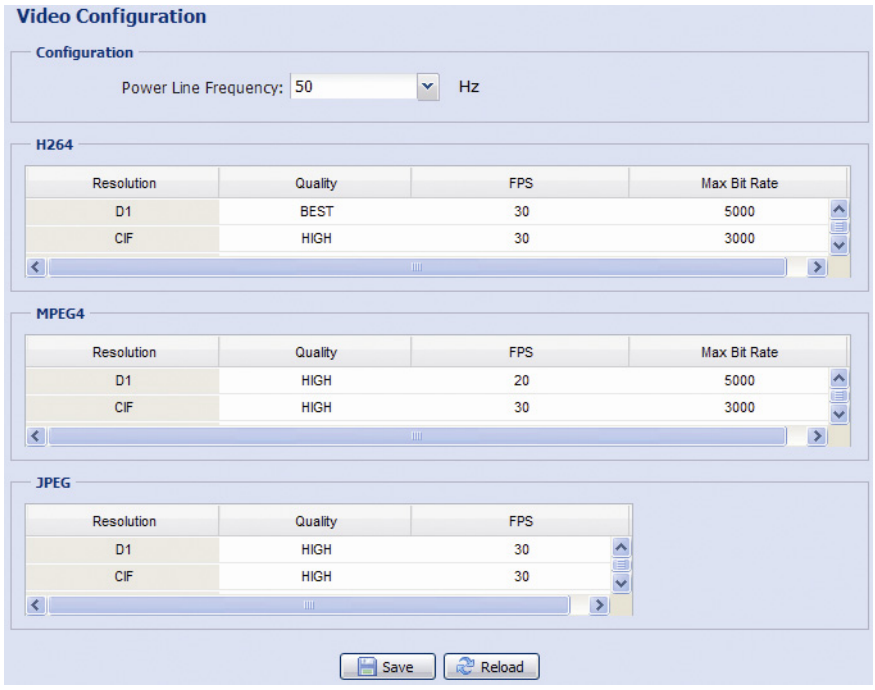


4.7.2 Video

Adjust video-related settings in different video format.

- “Quality” is related to image clearness.
- “FPS” is related to the fluency of the video. The more the FPS, the more fluent the video.
- “Max Bit Rate” is the maximum limitation of data transmission in the selected image format and resolution.

Note: QCIF is for mobile surveillance only.



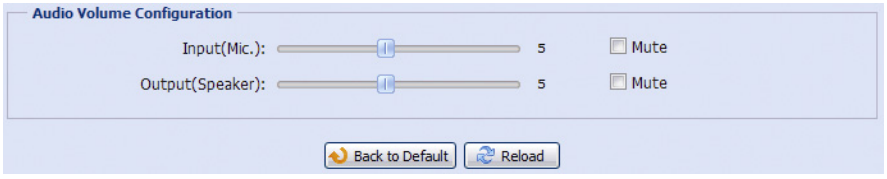
4.7.3 Color

Adjust the color performance from Brightness, Contract, Hue and Saturation. Click and drag the slider to preview the color change on the right side of ths page and adjust the image color.

To restore the default values, click “Back to Default”.

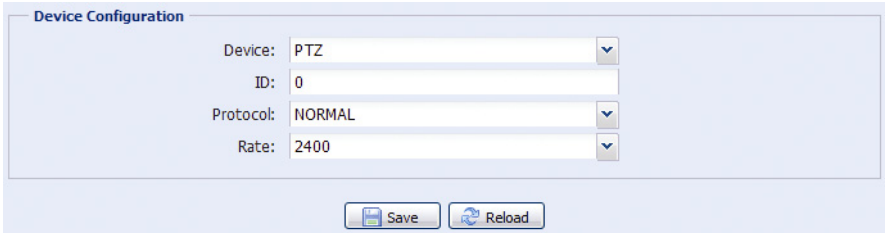
4.7.4 Audio

Drag the slider to adjust the volume of the microphone and speaker.



4.7.5 Device

When the connected camera is a PTZ camera, go to this menu to configure the PTZ camera for the PTZ operation to work normally.



a) Select the device to “PTZ”.
b) Set the ID to the value the same as the one set in the PTZ camera.

Note: For details, please refer to the user manual of the PTZ camera.

c) Select the protocol to “NORMAL” if the connected camera is AVTECH camera. If not, select “P-D” (Pelco-D) or “P-P” (Pelco-P) based on the camera you connected.
d) Set the baud rate to the value the same as the one set in the PTZ camera.

Note: For details, please refer to the user manual of the PTZ camera.

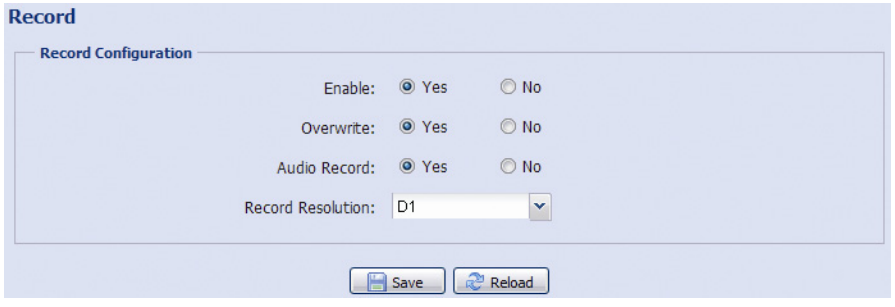
4.8 Record

4.8.1 Record

In “Record Configuration”, you can:

- Enable or disable the alarm record function. When “Enable” is set to “No”, the alarm record function is disabled even if you enable it in other configuration pages.
- Select if the data should be overwritten when the memory storage is full.
- Enable or disable the audio record function.
- Select the video resolution for event recording.

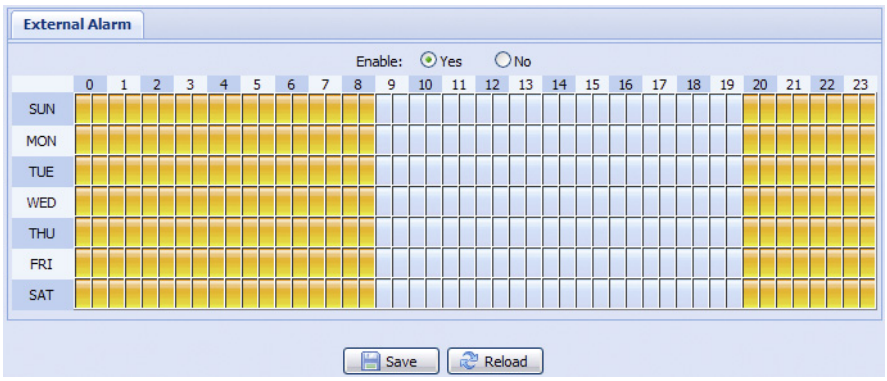
Note: The higher resolution you choose, the more accuracy and higher image quality the recording will be, but the faster the memory storage is consumed and become full.



4.8.2 Record Timer

To schedule alarm recording, enable it, and select the day and time for recording.

Note: The timer must be enabled for the record function to work properly.



4.9 Storage

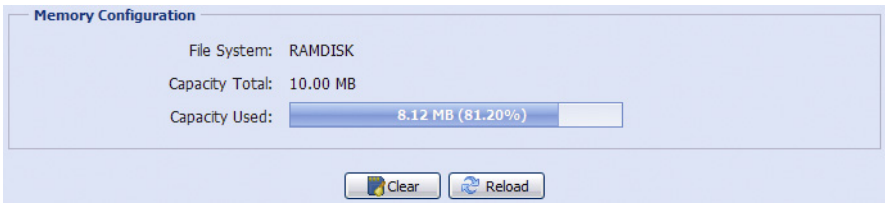
4.9.1 Memory

In “Memory”, you can check the remaining capacity for recording, or clear all recorded data saved if needed.

Note: The recorded data will be removed also when you reset or reboot this camera.

This camera can only save up to three alarm recordings.

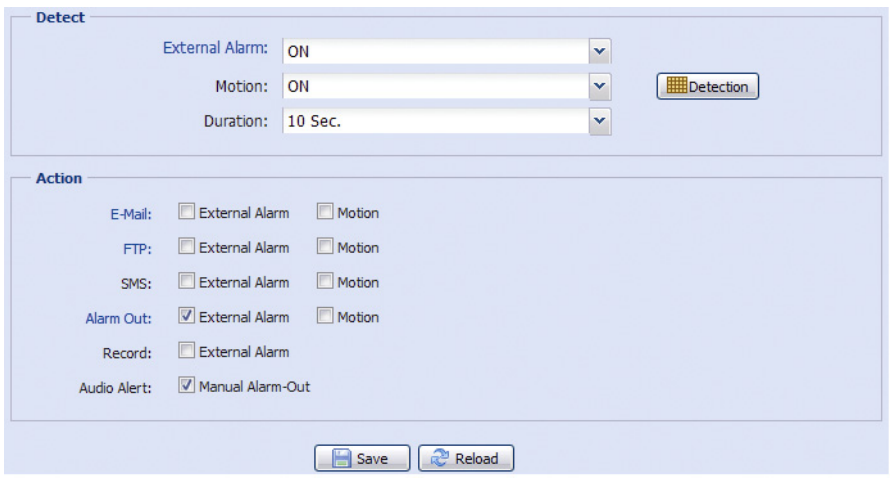
Note: To save more recorded data, it’s recommended to use this camera with the compatible NVR.



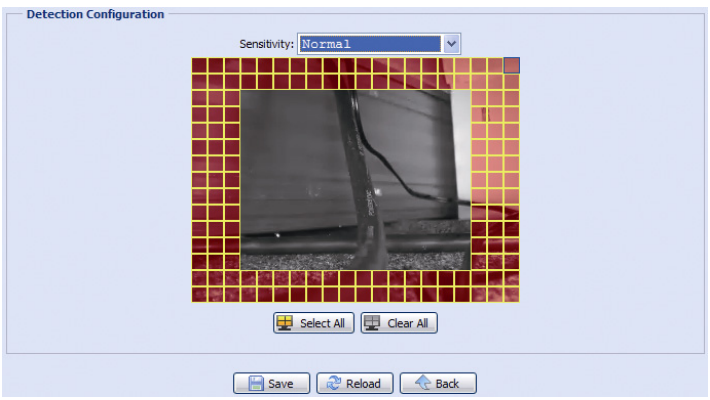
4.10 Trigger

4.10.1 Trigger

You can configure how this camera reacts when there’s an alarm or motion event.



◆ Detect

Item	Description
External Alarm	Enable or disable detection from external alarm-in device, and click the title “External Alarm” (in blue) to set “N.O.” or “N.C.” depending on the configuration of your alarm-in device.
Motion	Enable or disable motion detection. *Motion detection is not supported when the stream format is Motion JPEG.*
	When “Enable” is selected, click “Detection” to enter the motion detection area setting page as follows: 
	Sensitivity: Set the detection sensitivity from the drop-down list: High, Normal or Low.
	Area Setting: Set the motion detection area by selecting the area grids with your mouse. Pink grids represent the area that is not being detected while the transparent grids are the area under detection. You can set multiple areas under detection. Click “Clear All” to set the whole area undetected. Click “Select All” to set the whole area under detection.
Duration	Set the duration time for trigger recording (5 / 10 / 20 / 40 seconds).

◆ Action

Here defines how the camera delivers alerts to you for any event.

Item	Description
E-Mail	Select the event type you want to receive E-mail notifications when it occurs. Then, click the title “E-Mail” (in blue) to configure the media type (H264 / JPEG / MPEG4), file format (AVC / AVI), and record time (1 ~ 5 seconds) for the event video clip. The camera will send the captured video clip to the E-mail address(s) you assigned in “Network” → “Mail” once the selected event type occurs.
FTP	Select the event type you want to receive FTP notifications when it occurs. Then, click the title “FTP” (in blue) to configure the media type (H264 / JPEG / MPEG4), file format (AVC / AVI), and record time (1 ~ 5 seconds) for the event video clip. The camera will upload the captured video clip to the FTP site you assigned in “Network” → “FTP” once the selected event type occurs.
SMS	Select the event type you want to receive a text message when it occurs. The camera will send a text message to the mobile phone number you assigned in “Network” → “SMS” once the selected event type occurs.
Alarm Out	Select the event type you want to trigger the alarm-out device to work when it occurs. Then, click the title “Alarm Out” (in blue) to configure the trigger rule (LOW / HIGH).
Record	Select the event type you want to enable event recording when it occurs.
Audio Alert	Select the event type you want to enable audio alert when it occurs.

4.11 General

4.11.1 General

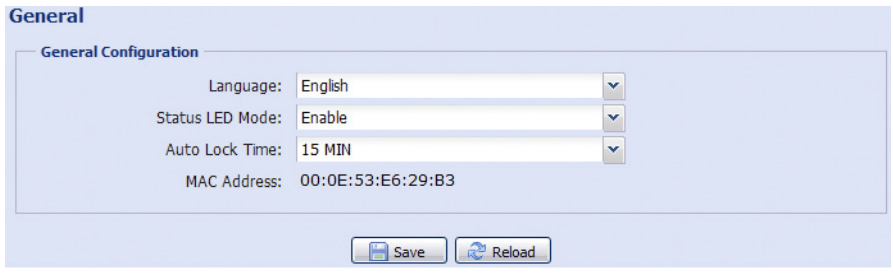
To change the language of UI interface, select from the drop-down list in “Language”.

To allow the status LED indicators to show the status, select “Enable” in “Status LED Mode”; to hide the status, select “OFF”; to only show the error status, select “Temporary Disable”.

Note: The status LED mode will be restored to “Enable” after camera reboot when “Temporary OFF” is selected.

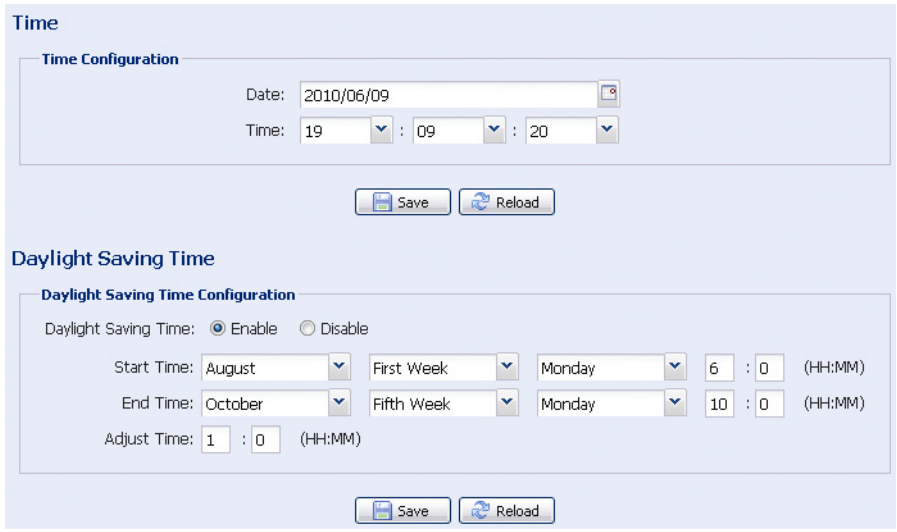
To lock camera access when it’s not used after the specified time, select “5 MIN”, “15 MIN” or “30 MIN” from the drop-down list of “Auto Lock Time”, or select “NEVER” to disable this function.

Note: When the camera access is locked after the specified time, to resume camera access, please enter the password.



4.11.2 Time

Set daylight saving time and the current time, and click “Save” to confirm.

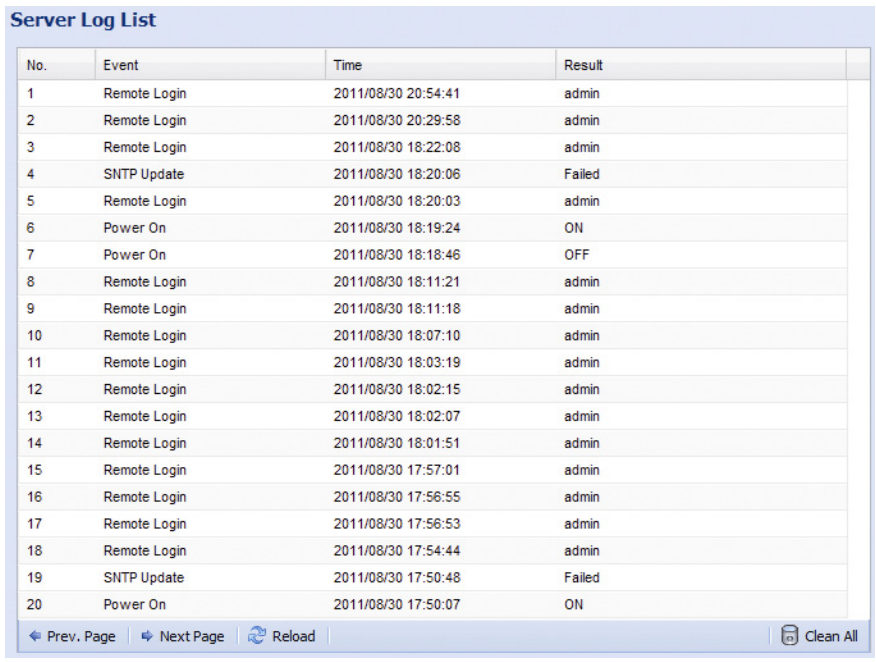


Function	Description
■ **Time Configuration**	
Date	Set the current date.
Time	Set the current time.
■ **Daylight Saving Time Configuration**	
Daylight Saving Time	Specify whether to use daylight saving time (Enable / Disable).
	If this function is enabled, set the time period (Start Time / End Time), and adjust the daylight saving time in hours (Adjust Time).

4.11.3 Server Log

To quickly search the system logs you want by event type, click “Prev. Page” or “Next Page” to find the logs you want, or check the event type(s) and click “Reload” to start searching.

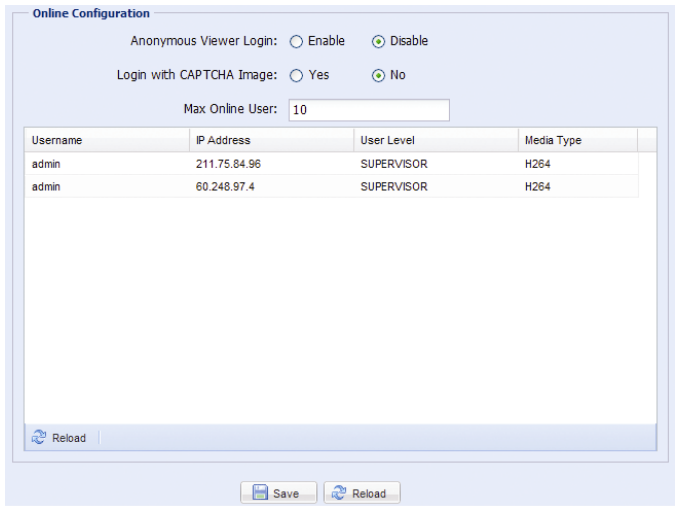
To clear all system event logs, click “Clear All”.


Server Log List
No. Event Time Result
1 Remote Login 2011/08/30 20:54:41 admin
2 Remote Login 2011/08/30 20:29:58 admin
3 Remote Login 2011/08/30 18:22:08 admin
4 SNTP Update 2011/08/30 18:20:06 Failed
5 Remote Login 2011/08/30 18:20:03 admin
6 Power On 2011/08/30 18:19:24 ON
7 Power On 2011/08/30 18:18:46 OFF
8 Remote Login 2011/08/30 18:11:21 admin
9 Remote Login 2011/08/30 18:11:18 admin
10 Remote Login 2011/08/30 18:07:10 admin
11 Remote Login 2011/08/30 18:03:19 admin
12 Remote Login 2011/08/30 18:02:15 admin
13 Remote Login 2011/08/30 18:02:07 admin
14 Remote Login 2011/08/30 18:01:51 admin
15 Remote Login 2011/08/30 17:57:01 admin
16 Remote Login 2011/08/30 17:56:55 admin
17 Remote Login 2011/08/30 17:56:53 admin
18 Remote Login 2011/08/30 17:54:44 admin
19 SNTP Update 2011/08/30 17:50:48 Failed
20 Power On 2011/08/30 17:50:07 ON
Prev. Page
Next Page
Reload
Clean All

4.11.4 Online

You can check the current online user(s) with respective online information. To refresh the list, click “Reload”.

- To allow anonymous login, select “Enable” in “Anonymous Viewer Login”.
- To disable image code verification at login, select “No” in “Login with CAPTCHA Image”.

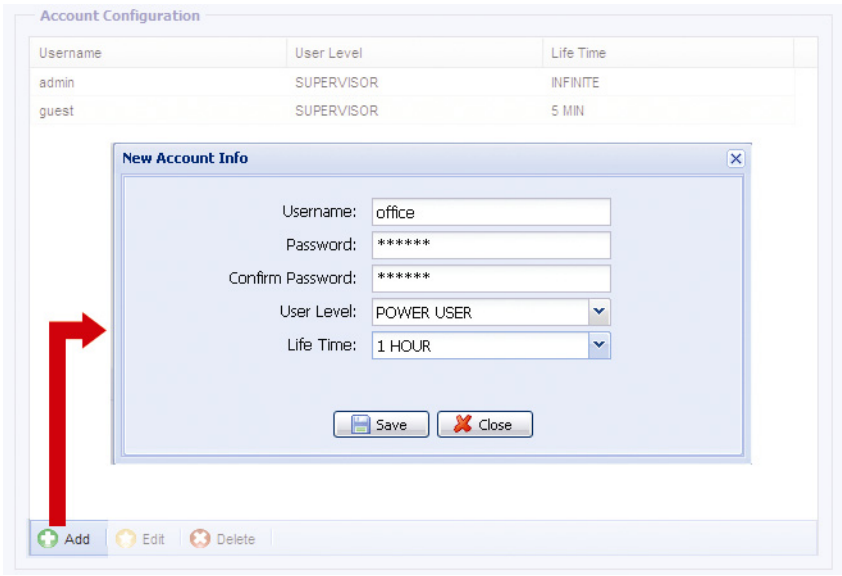


4.11.5 Account

You can create a new account with different user access privilege, or delete or modify an existing account setting.

How to create a new account

Step1: Click “New”, and fill in the following columns.



Column	Description
User Name	Set a user name that will be used for camera access. The user name allows up to 16 alphanumeric characters.
Password	Set the password that will be used for remote login. The password allows up to 16 alphanumeric characters.
Confirm Password	Enter the password again to confirm.
User Level	Set the security level of an account to give the permission to control different functions. There are four user levels: SUPERVISOR, POWER USER, NORMAL USER and GUEST.
Life Time	Select how long this account is allowed to stay online (1 MIN / 5 MIN / 10 MIN / 1 HOUR / 1 DAY / INFINITE)

Step2: Then, click “Save” to save your setting and create a new account.

How to modify or delete an existing account

Step1: Select the account you want to modify or delete.

Step2: To modify the account, click “Edit” to change the settings, and click “Save”.
To remove the account, click “Delete”.

Note: It’s not allowed to remove an account when there’s only one account in the account list.

4.11.6 Google Maps

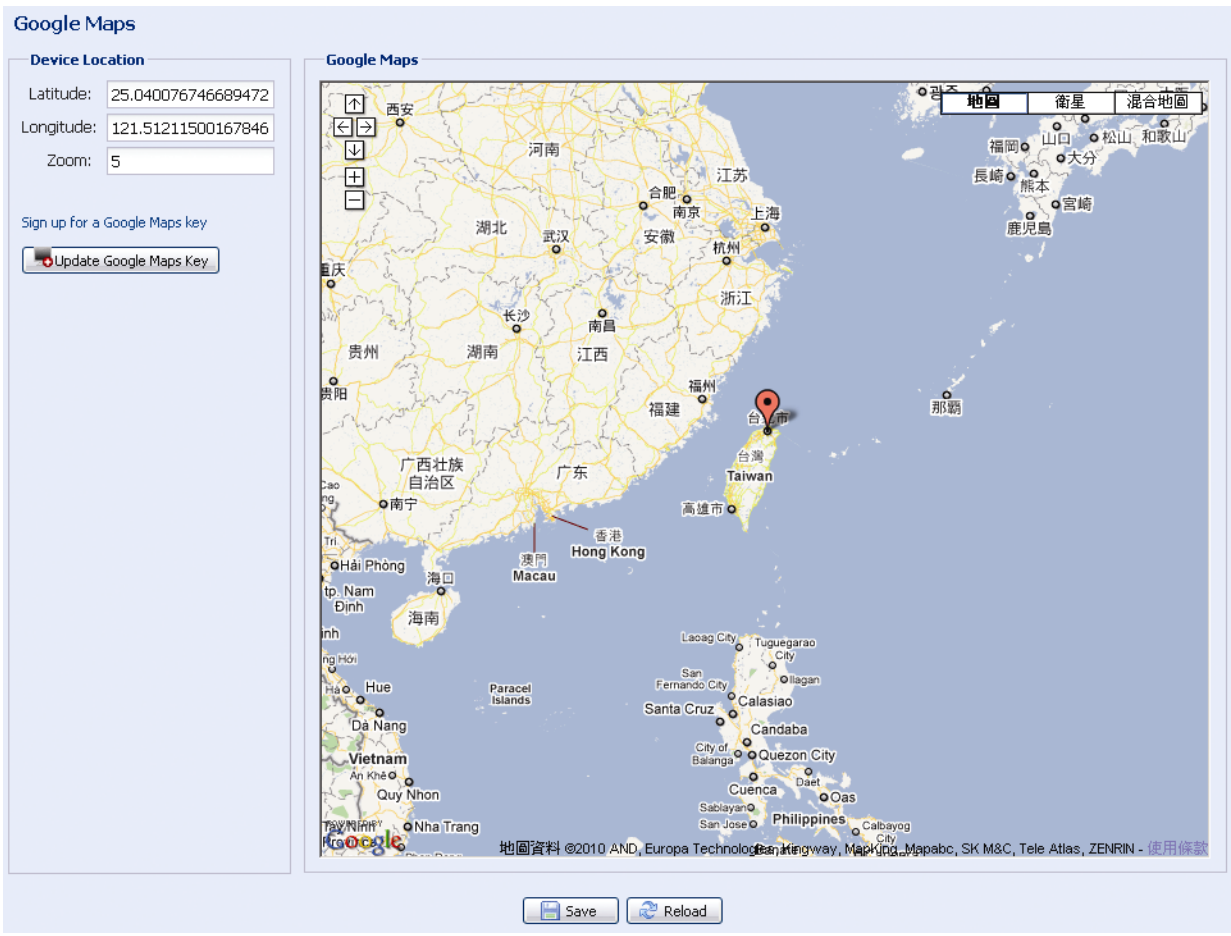
This function is used to let you know where the network camera is.

The system will prompt you to apply a Google Maps Key if your access is denied. Please follow the instructions below when you're denied:

Step1: Click "Sign up for a Google Maps key" to enter the application page.

Step2: Check the terms and conditions, and enter the IP address of the network camera. Then, click "Generate API Key".

Step3: Copy the generated API key, and click "Update Google Maps Key" on the web browser to paste it.



4.11.7 Maintenance

Firmware Upgrade

This function is used when users need to upgrade the camera for function scalability.

Note: Before using this function, make sure you have the correct upgrade files provided by your installer or distributor.

Note: The event videos saved in the camera will be removed after firmware upgrade. Make sure you've copied important events to your PC before firmware upgrade.

Step2: Select "Upgrade" to start system upgrading.

Note: You'll be prompted to keep current configurations. It's recommended to keep them, or all configurations will be restored to default values after upgrade.

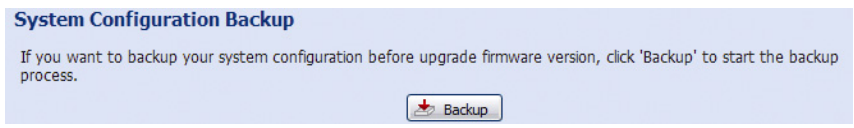
Note: It takes a few minutes to finish the upgrade process. Do not disconnect the power during firmware upgrade, or the upgrade may be failed. The camera will reboot after the upgrade.

System Configuration Backup

This function is used to copy your system configuration to a “System.bin” file.

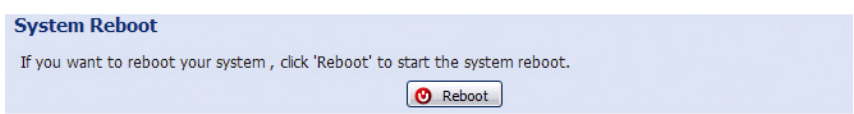
You may import the same system configuration to another camera, or restore your system configuration when the camera is reset to default values.

Select “System.bin” in “Firmware Upgrade”, and select “Upgrade” to import the system configuration.


System Configuration Backup
If you want to backup your system configuration before upgrade firmware version, click 'Backup' to start the backup process.
Backup

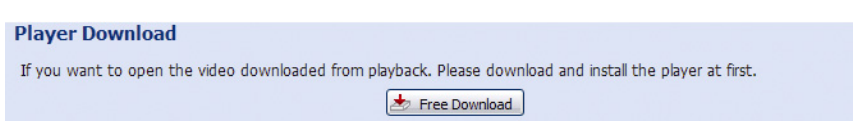
System Reboot

Select “Reboot” to restart your camera if needed.



Player Download

To see the event video clips downloaded to your PC, you need to first install our own video player in your PC.
Select “Free Download” to download the video player, and double click the file to install it.


Player Download
If you want to open the video downloaded from playback. Please download and install the player at first.
Free Download

APPENDIX 1 PRODUCT SPECIFICATIONS

	Video Server
Video Input	1 channel for analog & digital products,1.0 Vp-p 75 composite, BNC
Audio	1 channel audio input / 1 channel audio output
Alarm I/O	1 input / 1 output
Watch dog	Yes
RS-485 Port	Yes
Network Interface	Ethernet (10/100 Base-T)
Image Compression	H.264 / MPEG4 / JPEG
Video Adjustment	Brightness, Contrast, Saturation and Hue
Supported Protocols	DDNS, PPPoE, DHCP, NTP, SNTP, TCP/IP, ICMP, SMTP, FTP, HTTP, RTP, RTSP, RTCP,IPv4, Bonjour, UPnP, DNS, UDP
Resolution	704x480, 352x240 (NTSC) / 704x576, 352x288 (PAL)
Frame Rate	NTSC: 30, PAL: 25
Motion Trigger Recording	Yes
Motion Detection	3 adjustable factors
Trigger & Action	Triggered by GPIO Input or Motion detection, Action: E-mail video/images or video/images upload to FTP site
ONVIF	Yes
Mobile Phone support	Yes
Mac PC support	Yes
Multiple Video streaming	Yes (H.264 / MPEG4 / MJPEG)
Number of Online Users	10
Security	Multiple user access levels with password, IP address filtering
Speed Dome Control	Yes (AVTECH / PELCO-D / PELCO-P)
De-blocking	Yes
De-interlace	Yes
Security	Password protection
Power Source	DC12 V/1A
Current consumption (± 10mm)	About 0.6A
Operating Temperature	0℃~40℃
Dimensions (mm)**	118.6 x 75 x 28.6

** The specifications are subject to change without notice.

** Dimensional tolerance: ± 5mm

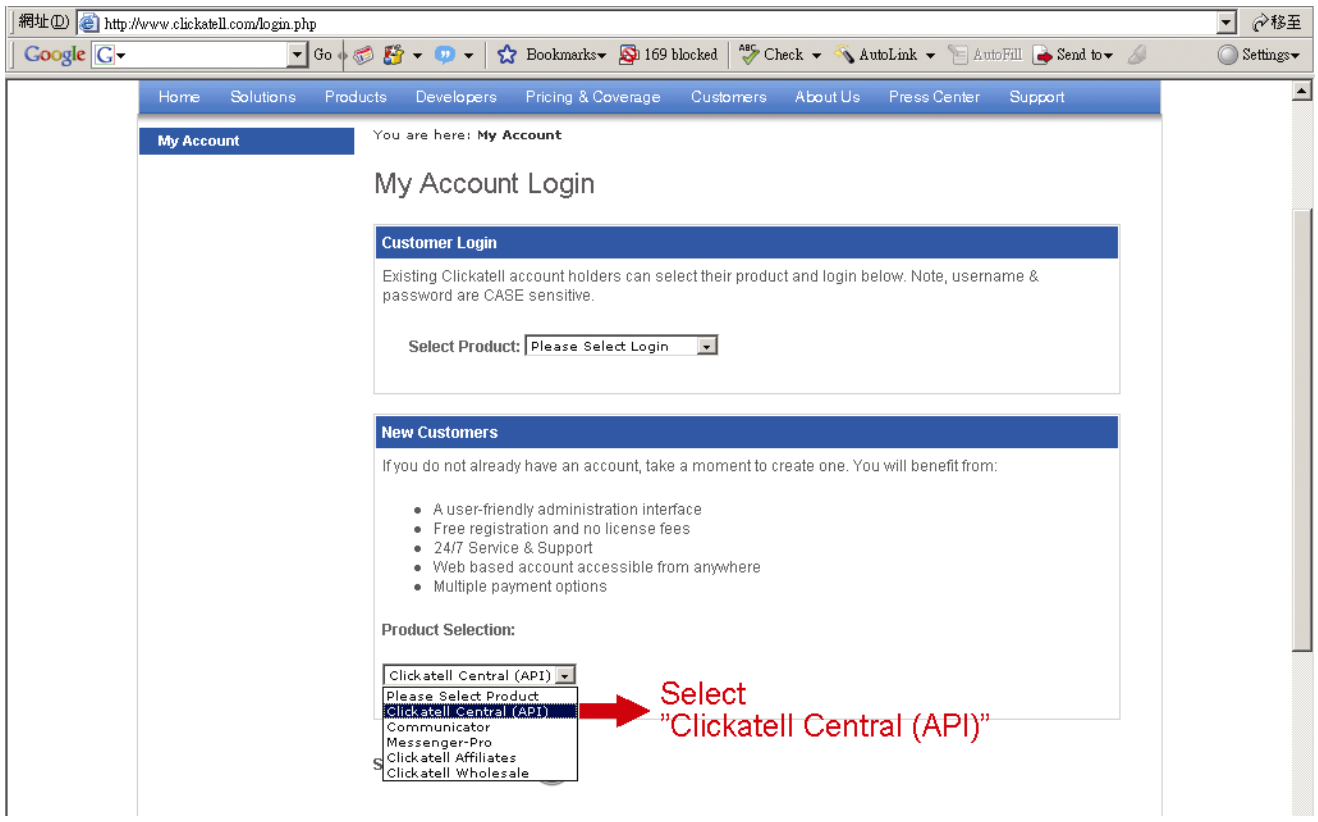
APPENDIX 2 API ID APPLICATION FOR SMS MESSAGING

To allow the camera automatically sending a text message when an event happens, you need to apply an API ID from Clickatell, one mobile messaging company, first.

Note: The SMS messaging is not totally free. You will be charged starting from the 11th message.

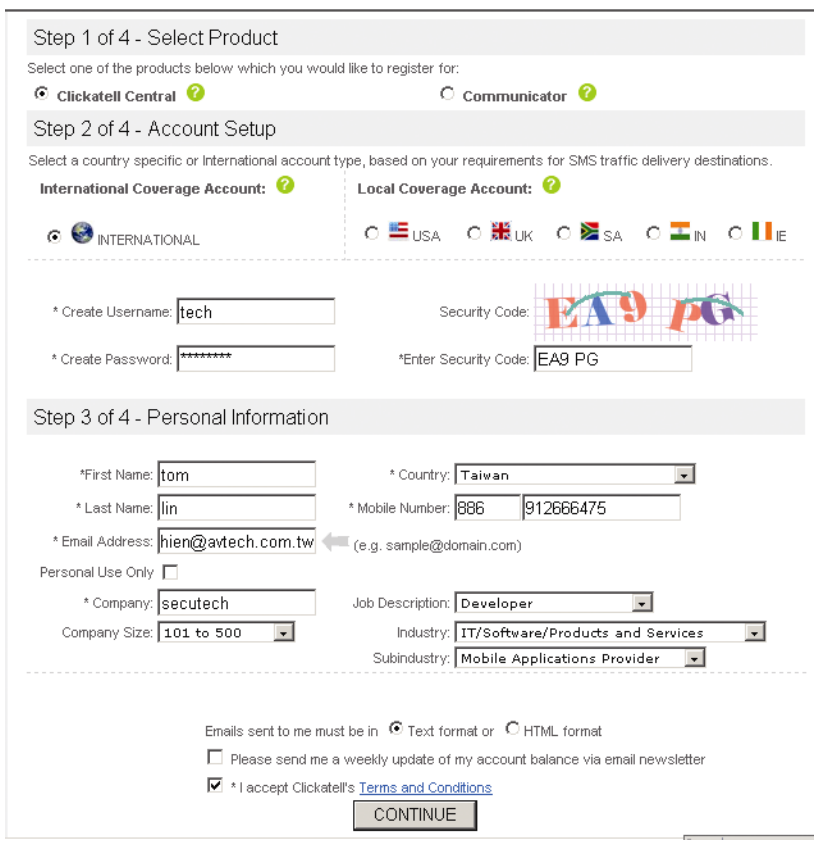
Please follow the steps below for application.

Step1: Go to http://www.clickatell.com/login.php. In “New Customers”, select “Clickatell Central (API)” from the drop-down list.



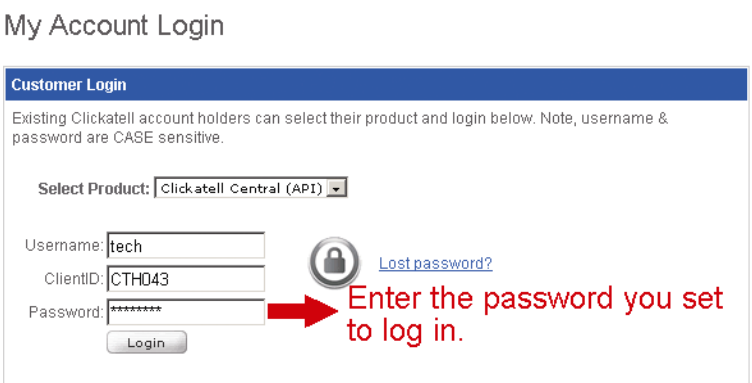
Step2: Fill in your information to create an account, and click “CONTINUE”.

Note: Note down the user name and password, and the mobile phone number you specified here for SMS notification setting later.

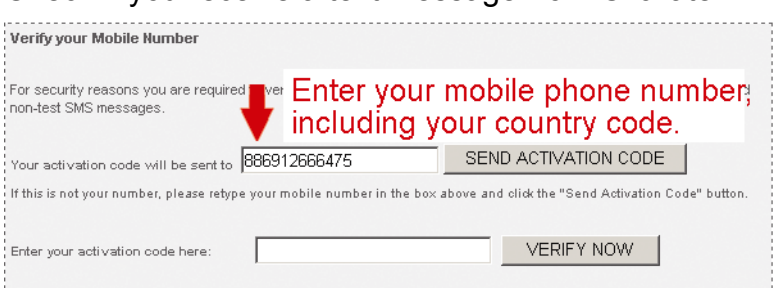

Step 1 of 4 - Select Product
Select one of the products below which you would like to register for:
Clickatell Central
Communicator
Step 2 of 4 - Account Setup
Select a country specific or International account type, based on your requirements for SMS traffic delivery destinations.
International Coverage Account:
Local Coverage Account:
INTERNATIONAL
USA
UK
SA
IN
IE
* Create Username: tech
Security Code:
* Create Password: ********
*Enter Security Code: EA9 PG
Step 3 of 4 - Personal Information
*First Name: tom
* Country: Taiwan
* Last Name: lin
* Mobile Number: 886 912666475
* Email Address: hien@avtech.com.tw
(e.g. sample@domain.com)
Personal Use Only
* Company: secutech
Job Description: Developer
Company Size: 101 to 500
Industry: IT/Software/Products and Services
Subindustry: Mobile Applications Provider
Emails sent to me must be in Text format or HTML format
Please send me a weekly update of my account balance via email newsletter
* I accept Clickatell's Terms and Conditions
CONTINUE

Step2: When the account is created, the system will automatically send an Email to your specified Email address and ask you to activate your account.

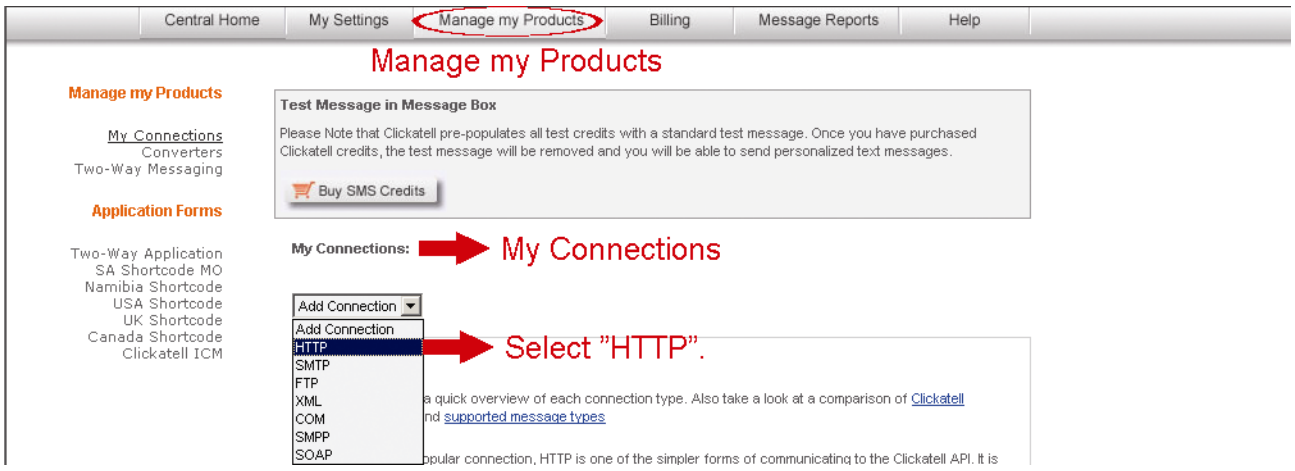
Click the link in the Email to complete account activation, and enter the login page as follows. Enter the password you set, and click “Login”.


My Account Login
Customer Login
Existing Clickatell account holders can select their product and login below. Note, username & password are CASE sensitive.
Select Product: Clickatell Central (API)
Username: tech
ClientID: CTH043
Password: ********
Login
Lost password?
Enter the password you set to log in.

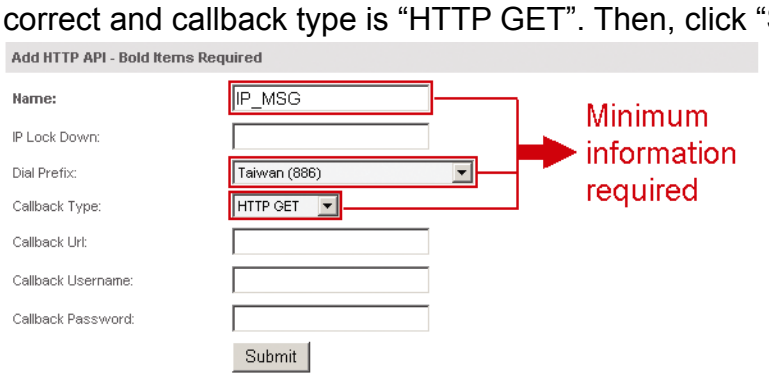
Step3: Enter the mobile phone number (including your country code) you want the text message to be sent, and click “SEND ACTIVATION CODE”. The system will send an activation code to that number for verification.
Check if you receive a text message from Clickatell.


Verify your Mobile Number
For security reasons you are required to ver
non-test SMS messages.
Enter your mobile phone number, including your country code.
Your activation code will be sent to 886912666475
SEND ACTIVATION CODE
If this is not your number, please retype your mobile number in the box above and click the "Send Activation Code" button.
Enter your activation code here:
VERIFY NOW

Step4: Go back to Clickatell, and click the tab “Manage my Products”.
Then, select “HTTP” from the drop-down list “My Connections”.



Step5: In “Add HTTP API”, enter a descriptive name for this service, and make sure the dial prefix is correct and callback type is “HTTP GET”. Then, click “Submit”.



Step5: You will get an API ID as follows.

Note: Note down the API ID for SMS notification setting later.